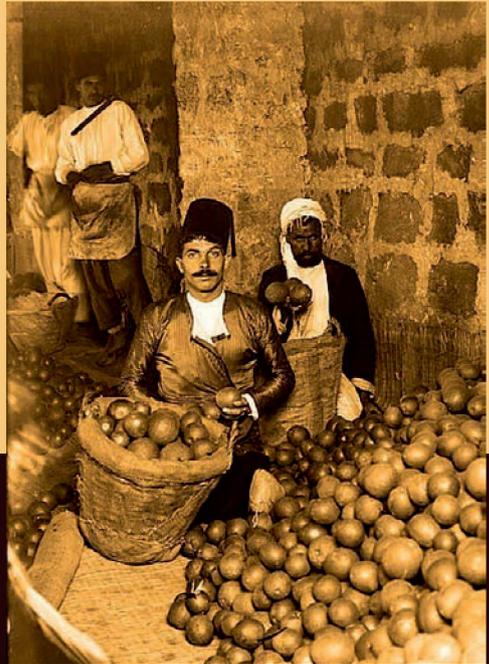


COMMODITIES IN HISTORY

THEORETICAL REFLECTIONS
AND EMPIRICAL CASE STUDIES



edited by
Juan Carmona-Zabala

edited by
Juan Carmona-Zabala

COMMODITIES IN HISTORY

**THEORETICAL REFLECTIONS AND EMPIRICAL
CASE STUDIES**

Institute for Mediterranean Studies – IMS

2023



Institute for Mediterranean Studies – IMS
Nikiforou Foka 130 & Melissinou,
P.O. Box. 119
Rethymno 74100, Crete, Greece
Τηλ.: 28310 25146
info@ims.forth.gr

ISBN: 978-618-85195-5-8

Editor: Juan Carmona-Zabala
Copy Editing & Proofreading: Andrew Hirst
Cover photograph: «Jaffa oranges 1920-1930», pinterest
Cover design: Eleni Avgeraki
Production: Asini editions, Pl. Karytsi 3, Athènes 106 52, www.asini.gr,
email: asini@asini.gr

© 2023 Institute for Mediterranean Studies / Foundation for Research
and Technology - Hellas

The publication of this book was supported
by the Hellenic Foundation for Research and
Innovation (H.F.R.I.) under the “2nd Call for
H.F.R.I. Research Projects to support Post-
Doctoral Researchers” (Project Number: 51)



CONTENTS

JUAN CARMONA-ZABALA, Introduction: Commodities in History 7

PART I. COMMODITY REGIMES

ERNST LANGTHALER / MAXIMILIAN MARTSCH / GABRIEL
TOBER, Conceptualizing Historical Commodity Studies:
The Case of Soy 25

JUAN CARMONA-ZABALA, Four Regimes of Value in the
History of Greek Tobacco, 1871-1981 61

PART II. COMMODITIES AND EMPIRE

ATAR DAVID, The Order of the Phoenix: Imperial Eco-
Politics on the Ottoman and American Date Palm
Commodity Frontiers, 1869-1904 95

SIDDHARTH SRIDHAR, The International Rubber
Regulation Agreement and the Remaking of the British
Empire in the Bay of Bengal 123

PART III. COMMODITY STATUS(ES)

SEMIH GÖKATALAY, National Commodity for whom? A
Social History of Oranges in Early Republican Turkey 161

DREW SWANSON, From Wild Game to Wildlife The
Decommodification of American Hunting, 1890-1940 193

PART IV. COMMODITIES AND ECONOMIC DEVELOPMENT

MANUEL VAQUERO PIÑEIRO AND LUCIANO MAFFI, Black Sea Durum Wheat between the 19th and 20th centuries: International Trade and Industrial development in Italy 227

TRYFONAS LEMONTZOGLU AND JUAN CARMONA-ZABALA, Evolution of the crop composition of Greek agriculture before EEC accession: evidence from seven representative crops in 52 districts 259

PART V. TOBACCO, SUPPLY CHAINS AND PRODUCTION NETWORKS IN SOUTHEASTERN EUROPE

KALEB HERMAN ADNEY, Tobacco and the Social Lives of Credit – Global Credit Markets and the Supply Chain of Oriental Tobacco 299

NIKOS ALEXIS, From National Chain(s) to Global Networks: Competition and Adaptation in the Greek Cigarette Industry (1950-1980) 335

DIMITRIOS STERGIOPOULOS, The Establishment of EOK and State Economic Policy in the Postwar Greek Tobacco Sector 367

CONTRIBUTORS 401

Introduction: Commodities in History

Juan Carmona-Zabala

The claim that commodities are all around us sounds almost too obvious, too much of a cliché to appear as an opening statement in a book. We are, indeed, surrounded by objects that somebody produced with an eye on future profit. In this basic sense, countless things meet the minimum requirement to fall into the commodity category. Less obvious is the proposition that one should dedicate time and effort to studying the history of commodities. Granted, using a material object as the starting point for our inquiry bears the promise of keeping us focused on the material, the undeniably real. Furthermore, since commodities are not just material, but are also produced, traded, desired, regulated and consumed by humans, they are fair game as far as humanistic inquiry is concerned. Yet, one could

contend that studying the history of a commodity is a form of petty antiquarianism with little prospect of uncovering anything of importance about the world. There are just too many commodities for one of them to be sufficiently consequential in and of itself. One could also impute commodity fetishism, and point out that what really matters is not so much commodities themselves, but the relationships between the humans involved in the production, trade and consumption of commodities.

The *commodity in general*, not any one commodity in particular, features as an object of study in the first chapter of *Capital*. Marx criticized those he called bourgeois economists for fetishizing commodities, i.e., for paying attention to the specific characteristics of material things, and the relationships between them. Doing so, he argued, led bourgeois economists to disregard the social relations that determined the processes of production and exchange under capitalism in the first place.¹ I find little to quibble with in the Marxian observation that, at a certain level of analysis, capitalism does tend to treat all sorts of work processes, and the commodities that result from them, as undifferentiated, abstract value. However, as soon as a historian's intellectual project goes beyond the question of what abstract categories govern capitalism as a form of economic organization, there is, at least a priori, little reason to remain uninterested in the particular attributes, locations, methods of production, and uses of specific commodities.

This essay has two aims. The first is to provide a preview of the chapters contained in this volume, all of which fall within the rubric 'history of commodities' in one way

1. Karl Marx, *Capital: A Critique of Political Economy* (London: Penguin, 1992), vol. 1, 169-177.

Introduction

or another. The second aim is to discuss how the context-specific study of certain commodities can contribute to fulfilling one of the main aspirations of the historical discipline: understanding past societies and how they changed over time. Because of the broad range of available historical studies on commodities, the discussion will not be exhaustive. Instead, I use the chapters of this volume as entry points into a discussion of what historical questions one can address through commodities. What warrants this reflective exercise is precisely the heterogeneity and vastness that has come to characterize the historical literature on commodities.

Often treated as a foundational moment for the field, the publication of Sidney Mintz's *Sweetness and Power* took place roughly forty years ago.² One could go much further back, though, in search of a historical study of sugar. In 1890, German chemist and science historian, Edmund Oscar von Lippmann published his *History of Sugar*.³ Better known to historians is Werner Sombart's *Luxury and Capitalism*, where he makes the case that demand for luxury commodities in European cities was a driving force in the birth, and early expansion, of the capitalist mode of production.⁴ The book pursues a Marxian research agenda while drawing from pre-existing historical research on specific commodities, including Lippmann's on sugar.

2. Sidney W. Mintz, *Sweetness and Power: The Place of Sugar in Modern History* (New York: Viking, 1985).

3. Edmund Oscar von Lippmann, *Geschichte des Zuckers, seiner Darstellung und Verwendung, seit den ältesten Zeiten bis zur Beginne der Rübenzuckerfabrikation: Ein Beitrag zur Kulturgeschichte* (Leipzig: Hesse, 1890).

4. Werner Sombart, *Luxus und Kapitalismus* (Munich: Duncker & Humblot, 1922).

Sombart's work is evidence of how a look at the concrete characteristics and uses of commodities can inform bold theses about important historical developments

The central place in the history of capitalism that Sombart assigns to luxury commodities is not detached from the traits that made them luxurious in the first place: softness, beauty, conduciveness to eroticism, non-essentiality, etc.⁵ Nor is their historical relevance unrelated to the ways in which their commercialization took place. Buyers of luxury commodities were usually persons of high status, or at least pretended to be. They were demanding vis-a-vis sellers, and often paid late, if at all, for their purchases. This circumstance forced merchants to make a series of moves that are characteristically capitalist: building up substantial amounts of capital, hiring workers to run conscientiously organized shops offering a diversified range of goods, setting fixed prices, etc.⁶ Setting aside the question of how well Sombart's argument about the relationship between luxury and capitalism has aged over roughly a hundred years, one thing is clear: the roles that different commodities have played in the history of capitalism remain a productive field of inquiry. Within the last decade, this has been exemplified by Beckert's study of the global history of capitalism through the lens of cotton production and trade, and by the more recent debate that he and others have held over the notion of commodity frontiers.⁷

5. Sombart, *Luxus und Kapitalismus*, 111-143.

6. Sombart, *Luxus und Kapitalismus*, 133-203.

7. Sven Beckert, *Empire of Cotton: A Global History* (New York: Alfred A. Knopf, 2015); Sven Beckert et al., "Commodity Frontiers and Global Histories: The Tasks Ahead," *Journal of Global History* 16, no. 3 (November 2021): 466-69; Sven Beckert et al., "Commodity Frontiers and

Introduction

It is easy to discern the influence of the global and environmental history approaches in the genealogy of the commodity frontiers project. Its main tenets could be summarized as follows: 1) capitalism is a process that organizes ever-increasing amounts of people and natural resources for the sake of commodity production and, ultimately, value extraction; 2) the concrete forms of organization change over time under the pressure of environmental degradation, human resistance against exploitation, and new technologies; and 3) understanding capitalism requires that we study history at both global and local scales of analysis, with a *longue durée* perspective.⁸ Informed by some of these theoretical premises, Atar David's contribution to the present volume uses the expansion of date production in the Ottoman Empire and the United States as an entry point into the history of imperial state power in the nineteenth and early twentieth centuries. Both the American and Ottoman states played important roles in the expansion of the crop. What did vary significantly were the sub-state actors involved, as well as the forms of innovation, administrative as well as technological, that facilitated the process. Dates allow David to identify points of useful comparison between two seemingly distant stories. One is the centralization of state power in the Ottoman

the Transformation of the Global Countryside: A Research Agenda," *Journal of Global History* 16, no. 3 (November 2021): 435–50; Maxine Berg, "Commodity Frontiers: Concepts and History," *Journal of Global History* 16, no. 3 (November 2021): 451–55; Ronald Findlay and Kevin Hjortshøj O'Rourke, "Commodity Frontiers: A View from Economic History," *Journal of Global History* 16, no. 3 (November 2021): 462–65; Ruth Mostern, "Comments on Time, Space and Method for the Study of Commodity Frontiers and the Transformation of the Global Countryside," *Journal of Global History* 16, no. 3 (November 2021): 456–61.

8. Beckert et al., "Commodity Frontiers and Transformation."

empire against the backdrop of increased integration with the world economy, a process in which fiscal reform was crucial. The other story is the absorption of uncultivated western lands into the American economy, which David conceptualizes as part of a form of imperial expansion.⁹

Commodity frontiers is one among many different approaches to the study of capitalist development that combine an interest in commodities with a global perspective. Evidence of the diversity of approaches that exists in the global commodities literature is the chapter that Ernst Langthaler, Maximilian Martsch and Gabriel Tober have penned for this volume. They survey multiple bodies of scholarship that have contributed to the methodological and theoretical development of the field of commodity studies writ large. Some of the theoretical propositions that they discuss are more explicitly focused than others on commodities as such. Commodity frontiers and commodity chains approaches focus more squarely on commodities than, say, actor-network theory¹⁰. The latter's interest in non-human *actants* includes commodities and non-commodities alike, which is not to say that it is any less relevant to the historical study of commodities and capitalism for that reason. In fact, the range of methodological approaches to the relationships between humans and non-humans that might serve the historian of commodities could expand even further, especially if we think of capitalism as

9. Another recent example of how the commodity frontiers approach lends itself to comparative outlooks is Bernd-Stefan Grewe, "Die Gold-Frontier in Südafrika," *Österreichische Zeitschrift für Geschichtswissenschaften* 30, no. 3 (December 16, 2019): 90–114.

10. Sharon Jackson, "Toward an Analytical and Methodological Understanding of Actor-Network Theory," *Journal of Arts & Humanities* 4, no. 2 (2015): 29–44.

Introduction

something more than a system for organizing the production and allocation of goods. If we accept, for instance, the premise that capitalism is also a socioeconomic system that keeps us in a permanent state of psychological dissatisfaction while promising future satisfaction that never actually arrives, then the history of commodities would have to incorporate concepts from psychoanalysis.¹¹ Likewise, concepts from religious studies and cognate fields might come in handy if we think of capitalism, as McCarraher does, as a religion.¹² Key here is the commitment, which Langthaler, Martsch and Tober express in their chapter, to find the right theory for the task at hand. In their case, it is the study of soy both in its global dimension, and in terms of its specific connections to Austria. Such commitment is necessary, I believe, for the history of commodities to remain a relevant field of inquiry.

While understanding the sociopolitical implications of globally traded goods over long periods of time features prominently in commodity history's to-do list, in it there are other items of equally high priority. A sizeable body of literature has explored the relationship between commodities and colonialism. Informed by dependency theory, historians of Latin America in particular have pointed at the extraction of natural resources as one of the main forms of exploitation of Latin American peoples by actors located in core areas of the world economy.¹³ While it is

11. Todd McGowan, *Capitalism and Desire: The Psychic Cost of Free Markets* (New York: Columbia University Press, 2016).

12. Eugene McCarraher, *The Enchantments of Mammon: How Capitalism Became the Religion of Modernity* (Harvard University Press, 2019).

13. See, for instance, the discussion of Brazilian sugar, gold and coffee among other commodities in Andre Gunder Frank, *Capitalism and Un-*

not strictly a scholarly work, one cannot help but think of Galeano's highly influential *Open Veins of Latin America*, with its references to goods such as gold, silver and sugar. In the more recent academic literature on Latin American commodities, we encounter works that draw from Global Commodity Chain (GCC) theory, such as the volume edited by Topik, Marichal and Frank,¹⁴ and from fields cognate to environmental history (e.g., geography and agroecology), as exemplified by a recent survey by Goebel and Montero.¹⁵ The link between center-periphery dynamics on one hand, and commodity production and trade on the other is, needless to say, not exclusive to Latin America and its metropolises. The *Commodities of Empire* project, an initiative that has been ongoing for over two decades, continues to publish works on commodities in different imperial contexts.¹⁶ Siddharth Sridhar's contribution to this volume lies at the intersection between the imperial commodities and the interwar cartels literature. His analysis of the inter-imperial and inter-class dimensions of the policies regulating rubber in the British empire is indicative of how control

derdevelopment in Latin America, Revised edition (New York; London: Monthly Review Press, 1969), 150-218.

14. Steven Topik, Carlos Marichal, and Zephyr L Frank, eds., *From Silver to Cocaine: Latin American Commodity Chains and the Building of the World Economy, 1500-2000* (Durham: Duke University Press, 2006).

15. Anthony Goebel and Andrea Montero, "Environmental History of Commodities in Central America," in *Oxford Research Encyclopedia of Latin American History*, by Anthony Goebel and Andrea Montero (Oxford University Press, 2021). For an overview of the theoretical approaches informing a good part of the literature on Latin American commodities, see Joan Bristol, "A Trail of Precious Goods: Colonial Latin American Commodity History," *History Compass* 11, no. 11 (November 1, 2013): 948-56.

16. "Publications," *Commodities of Empire*, accessed February 6, 2023, <https://commoditiesofempire.org.uk/publications>.

Introduction

over commodities and the value that they bear is an essential component of colonial rule.

Sridhar demonstrates that rubber prices had different implications for European-owned estates than for small-scale indigenous producers, and that colonial authorities were often willing to favor the former at the expense of the latter. Contestation around the rubber cartel serves as a reminder of Arjun Appadurai's claim that the value of commodities is ultimately a political issue, which gets temporarily settled in the form of what he calls *regimes of value*.¹⁷ Appadurai's concept of regimes of value has informed the chapter that I have written on the changing institutional arrangements determining the value of tobacco in Greece. Whatever general conclusion economic theorists might arrive at regarding the question of what determines the value of commodities, it behooves historians to, at the very least, test such conclusions under the light of the historical record. The same applies to the question of value extraction, i.e., of who gets to benefit from the value embodied in a commodity, and through which mechanisms. Kaleb Herman Adney's essay in this volume analyzes the concrete forms of value extraction that took place in the Ottoman tobacco sector on the basis of unequal access to credit. That credit money functions as a mechanism for value extraction from labor might very well be true in all contexts where credit money exists. The concrete relation of credit money to the process of price formation and to political power is, in contrast, historically contingent, and therefore in need of empirical investigation.

17. Arjun Appadurai, "Introduction: Commodities and the Politics of Value," in *The Social Life of Things: Commodities in Cultural Perspective*, ed. Arjun Appadurai (Cambridge: Cambridge University Press, 1988), 3-6.

That historians and economists often talk past each other, and that this becomes apparent in much of the scholarship on economic history, is hardly news.¹⁸ Referring to the state of economic historiography on modern Greece, Kostis has lamented the existence of two types of economic history; one for historians and one for economists.¹⁹ I share his view, but I also think that the problem is not specific to the Greek context. Since we could think of the historical study of commodities as a form of economic history, there are good reasons to believe that the economist's toolkit can be of great use. It is my hope that the chapter that I and Tryfonas Lemontzoglou have jointly contributed to this volume provides an example of the potential of this interdisciplinary approach. One observable dimension of the multi-faceted phenomenon known as economic development is the changes in the composition of the "commodity mix" that an economy produces. By applying statistical procedures common in agricultural economics, Lemontzoglou and I have identified correlations between the production of different agricultural commodities on the one hand, and the availability of technology and the waves of emigration from rural areas on the other. At first sight, these correlations, which concern a fifteen-year period in a small country like Greece, might appear to be of interest only within the narrow confines of agricultural economics. Yet these correlations point at areas for further inquiry with regard to, at least, two of the most important themes

18. Naomi Lamoreaux, "The Future of Economic History Must Be Interdisciplinary," *The Journal of Economic History* 75, no. 4 (2015): 1251–57.

19. Kostas Kostis, "The Wealth of Greece. Writing an Economic History of 20th c. Greece," *Bulletin de Correspondance Hellénique Moderne et Contemporain*, no. 1 (2019), endnote 10.

Introduction

in postwar Greek history. One is the question of the drivers, and impact, of emigration and urbanization. The other is the purported backwardness of the Greek countryside despite (or because of, depending on the commentator) intense state involvement in the rural economy.

Commodities can help us overcome the limitations of the much maligned, yet undeniably alive, national paradigm of historical research. But the study of commodities can also draw from the existing large bodies of local and national history, and can in fact contribute to them.²⁰ A number of chapters in this volume are vivid examples of how existing debates in different national historiographies can be enriched through the study of commodities. Such is the case of the formation of a Turkish national polity after the collapse of the Ottoman Empire, and how questions of class, economic dirigisme and culture featured in that process. Semih Gökatalay's study of how oranges became imbued with national meaning in the early republican period speaks to these questions. The obscuring of class differences upon which nationalism is premised becomes manifest in the contrast between the official rhetoric of the Turkish state, and the fact that class determined the relationship that a Turk would have to the commodity.

The unequal, politically contested character of access to commodities, or rather to the natural resources needed to produce them, lies at the core of Drew Swanson's chapter on the history of hunting and wildlife conservation in the United States. The commodification of the experience of hunting was closely connected, Swanson shows us, to the decommodification of wildlife through the delegitimation

20. Berg, "Commodity Frontiers: Concepts and History."

of for-profit hunting. Here, we do not only learn about the changing relationship of American economic and political institutions to the natural environment: The history of de-commodification of American wildlife is yet another example of how the history of capitalist development is not an unstoppable march toward the ever more unbridled commodification of everything. In fact, the expansion of commodity production is often tied to the emergence of new limits to what can be commodified. New productive activities might even appear whose results are not commodities, as the literature on anti-commodities has demonstrated.²¹

By now it should be clear to the reader that, as the object of historical study, commodities lend themselves to a variety of scales of analysis, whether global, imperial, or national. But commodities are also particularly useful when we do global history at national or local scales. By “doing global history” I do not mean aspiring to planetary totality. I mean an approach that, regardless of geographic scope, “presumes, and explicitly reflects on, some form of global integration.”²² Luciano Maffi and Manuel Vaquero Piñeiro contribute to this volume with a study of durum wheat trade centered around the development of pasta manufacturing in Italy. While some Italian firms occupy prominent positions in today’s globalized pasta market, one would nonetheless be forgiven for approaching the his-

21. Sandip Hazareesingh and Harro Maat, eds., *Local Subversions of Colonial Cultures: Commodities and Anti-Commodities in Global History* (London: Palgrave Macmillan UK, 2016); Harro Maat, “Commodities and Anti-Commodities: Rice on Sumatra 1915–1925,” in *Rice: Global Networks and New Histories*, ed. Francesca Bray et al. (New York: Cambridge University Press, 2015), 335–54.

22. Sebastian Conrad, *What Is Global History?* (Princeton, Oxford: Princeton University Press, 2016), 9.

Introduction

tory of Italian pasta as a national tale of industrialization and changing consumer habits. Maffi and Vaquero Piñeiro go beyond the national by bringing together insights about developments happening in places as distant from Italy as Canada, the United States and Russia, without which the history of Italian pasta would be incomplete.

The question of how the globalizing economy both shapes, and is shaped by, local developments has attracted the interest of economic sociologists and geographers for decades. While inspired to a large extent by socioeconomic developments taking pace from the 1970s onward, the Global Commodity Chains(GCC) approach was also influenced by the historical outlook inherent to world-systems theory.²³ As Langthaler, Martsch and Tober tell us, historians have drawn concepts from GCC and its outgrowth, Global Value Chains (GVC) in a number of studies focusing on commodities. Probably because of its relative novelty, it is still to be seen to what extent the latest incarnation of the “chains” approach, Global Production Networks (GPN), gains traction in the historical discipline. A priori, and judging from some of the foundational texts in the GPN literature, some could be tempted to think of the approach as more suited to the study of stakeholders involved in the production, commercialization and consumption of commodities, rather than for studying commodities themselves.²⁴ However, when one gets down to the business of

23. Terence Hopkins and Immanuel Wallerstein, “Commodity Chains in the World-Economy Prior to 1800,” *Review (Fernand Braudel Center)* 10, no. 1 (1986): 157–70.

24. Neil M. Coe and Henry Wai-chung Yeung, *Global Production Networks: Theorizing Economic Development in an Interconnected World* (Oxford: Oxford University Press, 2015); Neil M. Coe and Henry Wai-chung Yeung, “Global Production Networks: Mapping Recent Conceptual

posing, and answering, historical questions through the prism of GPN theory, it becomes apparent that actors and commodities cannot be analyzed in isolation from each other. The contributions by Nikos Alexis and Dimitris Stergiopoulos to this volume mobilize concepts from GPN theory in their study of two different aspects of Greece's tobacco industry: the reactivation of export-oriented tobacco leaf after World War II, and the "Americanization" of cigarette manufacturing from the 1960s onward. Once again, a focus on commodities allows these historians to bridge the national and the transnational scales of analysis, in these cases by interrogating aspects central to GPN theory, such as those of inter-firm and regional coupling, value capturing, upgrading, etc.

This volume is the result of an online workshop series carrying the same title, held between September and October of 2022, and hosted by the Foundation for Research and Technology - Hellas. The broad range of topics and approaches discussed over the workshop's six panels bears witness to the extent to which commodities have by now become established as a topic of historical research. The chapters available to the reader in this volume are either edited versions of the original papers, or essays that build upon the material initially presented at the workshop. Instead of bringing scholars together to discuss a predefined set of questions and aiming at relatively conclusive answers, the goals of the meetings and the present volume have been to showcase the diverse forms that commodity

Developments," *Journal of Economic Geography* 19, no. 4 (July 1, 2019): 775–801; Liena Kano, Eric W. K. Tsang, and Henry Wai-chung Yeung, "Global Value Chains: A Review of the Multi-Disciplinary Literature," *Journal of International Business Studies*, no. 51 (2020): 577–622.

Introduction

history takes today, and to provide an opportunity for dialog between commodity historians working on different topics. In this regard, this collection is somewhat different from the usual edited volume.

The editorial line has been to encourage contributors to reflect on how their empirical, commodity-centered case study can speak either to broader, but concrete, historical questions, or to more theoretical debates about the nature of commodities and their relationship to historical change. Needless to say, no edited volume of this kind can do justice to all the possible theorizations, commodities, geographic regions and historical periods. Certain regions of the world are better represented than others in this volume. The chronological focus of most chapters lies mainly on the nineteenth and twentieth centuries. Yet much ground is covered in this set of essays in terms of demonstrating current trends in the historical study of commodities, and of contributing to existing bodies of historiography through commodity-centered approaches. Readers of different intellectual predispositions will surely find something of value. Part I of the volume consists of two essays where commodities feature as embedded in relatively stable regimes that shift at specific points in time. Part II explores different aspects of the relationship between commodities and imperial power. In part III, the eligibility of things for commodity status appears as historically contingent, as does the status of a commodity within national narratives. Part IV exemplifies how commodities can feature in studies focused on economic development, in this case in terms of industrialization and agricultural modernization. Last, the essays making up part V analyze Oriental tobacco, one of southeastern Europe's main exports in the nineteenth and twentieth

centuries, by mobilizing concepts drawn from the “chains and networks” (i.e., GCC, GVC and GPN) literature.

For all their virtually endless diversity, and regardless of their abundance or level of refinement, arguably all commodities share one trait: they leave us ultimately unsatisfied. Whether we consume them, desire them, or even outright reject them makes little difference in this regard. The same could be said about commodities as objects of historical inquiry. Most probably, commodities will never suffice as bearers of historical truth on their own. No matter how many of them we study, a certain degree of intellectual dissatisfaction is likely to remain at the end of the scholarly endeavor. And still, whether as historians or simply as people who need things to exist in this world, for the time being it looks like we can hardly, if at all, do without commodities.

PART I
COMMODITY REGIMES

Conceptualizing Historical Commodity Studies: The Case of Soy

Ernst Langthaler / Maximilian Martsch / Gabriel Tober

INTRODUCTION

The history of capitalism has gained renewed attention over the last 15 years. This renaissance has materialized in a wave of book publications, ranging from short introductions to comprehensive collections, monographs, and handbooks.¹ The ‘new history of capitalism’ is markedly shaped by developments reaching beyond the academic

1. Jürgen Kocka, *Capitalism: A short history* (Third printing, and first paperback printing). (Princeton University Press, 2018); Larry Neal and Jeffery G. Williamson (Eds.), *The Cambridge History of Capitalism* (2 vols.). (Cambridge University Press, 2014).

field – from the Great Recession of 2008 to the Great Lock-down of 2020 that both illustrated neoliberal capitalism’s vulnerability to fundamental crises. This academic reorientation might counteract the historiographical divergence of economic history, adopting econometric models and methods (‘cliometrics’) and the ‘rest’ of history, enmeshed in rather culturalist epistemologies.² For instance, Beckert’s *Empire of Cotton*, one of the flagships of the ‘new history of capitalism’, has provoked discussions in and between both camps of the historiographical field.³

With capitalism’s renaissance, historians and other scholars from the social sciences and humanities have rediscovered commodities, both as an object of study and as a research perspective on more comprehensive issues. Classical theorists such as Smith, Ricardo, and Marx define a commodity as a value-bearing product to be sold in a market.⁴ However, rather than defining a permanent state, commodification is a stage that products may enter and exit, as Polanyi points out in his distinction between ‘fictitious commodities’, i.e., goods and services not produced for sale (land, labor, money, etc.), and genuine ones.⁵ The interdisciplinary discussion about commodity

2. Jan de Vries, “Changing the Narrative: The New History That Was and Is to Come,” *The Journal of Interdisciplinary History* 48, no. 3 (2017): 313–334. https://doi.org/10.1162/JINH_a_01160

3. Sven Beckert, *Empire of cotton: A global history* (1. ed.). (New York: Knopf, 2014); Eric Hilt, “Economic History, Historical Analysis, and the “New History of Capitalism””, *The Journal of Economic History* 77, no. 2 (2017), 511–536. <https://doi.org/10.1017/S002205071700016X>

4. Nicholas Sammond, “Commodities, Commodity Fetishism, and Commodification,” in *The Blackwell Encyclopedia of Sociology*, ed. George Ritzer (Blackwell, 2007): 607–612.

5. Ernst Langthaler and Elke Schüßler, “Commodity Studies with Polanyi: Disembedding and Re-Embedding Labour and Land in Contemporary

studies ranges between two extreme positions: on the one side, sociological and anthropological approaches in opposition to Marxian-style materialism focus on commodified things and their multi-sited biographies. On the other side, scholars from political economy and ecology reject the culturalist ‘commodity fetishism’ (Marx) by concentrating on the social and natural relations of production, distribution, and consumption of global capitalism.⁶

In this chapter, we will develop an integrated framework for historical commodity studies with an agro-food focus that aims to overcome the dualism between culturalist and materialist extremes. This effort arises from a current research project on agro-food change in Austria since the 1870s through the lens of soy (*SoyChange*).⁷ Section 2 discusses three approaches from the materialist-culturalist spectrum with regard to their strengths and weaknesses. Section 3 presents an integrated theoretical framework, the triad of commodity studies, and operationalizes it to the needs of empirical research. Section 4 substantiates our considerations with the story of soy’s emergence as a global commodity in the ‘long twentieth century’.

Capitalism,” *Österreichische Zeitschrift Für Soziologie* 44, no. 2 (2019): 209–223. <https://doi.org/10.1007/s11614-019-00339-2>

6. Henry Bernstein and Liam Campling. “Commodity Studies and Commodity Fetishism I: Trading Down.” *Journal of Agrarian Change*, 6, no. 2 (2006): 239–264. <https://doi.org/10.1111/j.1471-0366.2006.00121.x>; Henry Bernstein and Liam Campling, “Commodity Studies and Commodity Fetishism II: ‘Profits with Principles?’” *Journal of Agrarian Change* 6, no. 3 (2006): 414–447. <https://doi.org/10.1111/j.1471-0366.2006.00128.x>

7. See <https://www.jku.at/en/institut-fuer-sozial-und-wirtschaftsgeschichte/forschung/projects/soy-and-agro-food-change-soychange-austria-from-a-multi-level-perspective-1870-2020>.

MULTIPLE APPROACHES

Commodities in food regimes

Food regime analysis (FRA) deals with the restructuring of agriculture and food in the context of capitalist globalization since the 1870s. The notion of food regimes was first introduced in development sociology by Friedmann and later specified together with McMichael.⁸ FRA accentuates the role of the global food trade in political economy and capital accumulation across time and space, more specifically since the end of the 19th century.⁹ FRA is rooted in world system theory¹⁰ and regulation theory¹¹. This includes three interrelated elements: value extraction and capital accumulation along transnational commodity chains by market-dominating actors, typically in the domain of processing and trading; the stabilizing regulation of commodity flows by formal and informal institutions and associated actors (nation-states, transnational companies, social movements, etc.); and the social and natural relations of production, distribution, and consumption

8. Harriet Friedmann, "International regimes of food and agriculture since 1870," *Peasants and Peasant Societies*, no. 2 (1987): 258–276; Harriet Friedmann and Philip McMichael, "Agriculture and the state system: The rise and decline of national agricultures, 1870 to the present." *Sociologia Ruralis*, 29 no. 2, (1989): 93–117. <https://doi.org/10.1111/j.1467-9523.1989.tb00360.x>.

9. Fridolin Krausmann and Ernst Langthaler, "Food regimes and their trade links: A socio-ecological perspective," *Ecological Economics*, 160 (2019): 87–95. <https://doi.org/10.1016/j.ecolecon.2019.02.011>; Philip McMichael, "A food regime genealogy." *The Journal of Peasant Studies* 36, no. 1 (2009): 139–169.

10. Immanuel Wallerstein, *World-systems Analysis*, (Duke University Press, 2004). <https://doi.org/10.1515/9780822399018>;

11. Robert Boyer and Yves Saillard, *Regulation theory: The state of the art*. (Routledge, 2002).

(labor relations, nutrient cycles, consumer preferences, etc.).¹² When regulatory institutions become contradictory and contested, the regime may be destabilized and – if attempts at restabilization fail – descend into crisis and transition to a different one.¹³

From a historical point of view, FRA distinguishes three successive food regimes: the first, British-centered or ‘extensive’ food regime (1870s–1920s) evolved around free-trade flows of surplus grains and meat from agricultural frontiers in European settler colonies to industrial centers in Northwest Europe. Cheap foodstuffs for working-class households stabilized industrial capitalism and nation-states; first of all, Britain’s position as the ‘workshop of the world’ and colonial empire. The second, US-centered or ‘intensive’ food regime (1940s–1970s) emerged out of the turmoil of the Great Depression and the Second World War and the rise of the USA to world-economic and geopolitical dominance. It evolved around duty-free US exports of feeding stuff to Western European and Japanese livestock complexes, as well as bread grains as food aid for ‘Third World’ countries to fight both famine and communism. The third, WTO-centered or ‘flexible’ food regime (from the 1990s) combined the previous US trade network with new major exporters (e.g., Brazil) and importers (e.g., China) in the de- and reregulated world market.¹⁴ However,

12. Philip McMichael, *Food regimes and agrarian questions. Agrarian change and peasant studies: Vol. 3.* (Practical Action Publishing, 2013). <http://www.jstor.org/stable/j.ctt1hj553s>.

13. McMichael, “A food regime genealogy,” 139.

14. Harriet Friedmann, “From Colonialism to Green Capitalism: Social Movements and Emergence of Food Regimes,” in *Research in rural sociology & development: v. 11. New directions in the sociology of global development* (Vol. 11), ed. Frederick H. Buttel and Philip McMichael (Emerald Group Publishing Limited, 2005), 227–264.

there is controversy among food regime scholars, ranging between McMichael's¹⁵ notion of a full-fledged 'corporate' food regime and its critics, who rather claim the 'long hangover' of the US-centered food regime.¹⁶ FRA's historicity has facilitated its wide adoption by agro-food studies in general¹⁷ and agricultural and food history in particular.¹⁸

Only loosely connected, but quite compatible with FRA, Moore's 'world-ecological' concept of commodity frontiers has recently been adopted by scholars of the 'new history of capitalism'.¹⁹ Commodity frontiers are contested spac-

[https://doi.org/10.1016/S1057-1922\(05\)11009-9](https://doi.org/10.1016/S1057-1922(05)11009-9); André Magnan, "Food Regimes," in *The Oxford handbook of food history*, ed. Jeffrey M. Pilcher (Oxford University Press, 2012), 370–388. <https://doi.org/10.1093/oxfordhb/9780199729937.013.0021>; McMichael, "A food regime genealogy"; McMichael, *Food regimes and agrarian questions*.

15. McMichael, *Food regimes and agrarian questions*.

16. Bill Pritchard, "The long hangover from the second food regime: a world-historical interpretation of the collapse of the WTO Doha Round," *Agriculture and Human Values* 26, no. 4 (2009): 297–307. <https://doi.org/10.1007/s10460-009-9216-7>.

17. Ulrich Ermann, Ernst Langthaler, Marianne Penker and Markus Schermer. *Agro-Food Studies: Eine Einführung. UTB: Vol. 4830* (Böhlau Wien; UTB, 2018). <https://elibrary.utb.de/doi/book/10.36198/9783838548302> <https://doi.org/10.36198/9783838548302>

18. Ángel Luis González-Esteban, "Patterns of world wheat trade, 1945–2010: The long hangover from the second food regime," *Journal of Agrarian Change* 18, no. 1 (2018), 87–111. <https://doi.org/10.1111/joac.12219>; Warren J. Belasco and Roger Horowitz, eds., *Food chains: From farmyard to shopping cart* (University of Pennsylvania Press, 2009); Jane Dixon, "From the imperial to the empty calorie: how nutrition relations underpin food regime transitions", *Agriculture and Human Values* 26, no. 4 (2009): 321–333. <https://doi.org/10.1007/s10460-009-9217-6>; David Goodman and Michael Watts, eds., *Globalising food: Agrarian questions and global restructuring* (Routledge, 1997). <https://ebookcentral.proquest.com/lib/kxp/detail.action?docID=178636>; Fridolin Krausmann and Ernst Langthaler, "Food regimes and their trade links".

19. Jason W. Moore, "Sugar and the Expansion of the Early Modern World-Economy: Commodity Frontiers, Ecological Transformation, and In-

es within the context of capitalist incorporation of new sources of value extraction – labor and nature. Since capital accumulation depends on sustained growth, frontier expansion became the ‘lifblood of capitalism’.²⁰ The inclusion of commodity frontiers moves the spotlight of FRA to the global countryside. After the colonization of the last overseas territories by European settlers in the first food regime, global capitalism shifted from extensive to more intensive forms of incorporation, such as the promotion of productivist farm technologies and consumerist lifestyles in the second and third regimes. The concept of commodity frontiers can be linked to FRA in at least two ways: As a supplement, commodity frontiers are conceived as regional zones of capitalist expansion (and occasional contraction) at the production and consumption sides of global commodity chains under successive food regimes.²¹ As an alternative, commodity regimes are defined as “moments in the history of commodity frontiers in which particular sets of labor relations and property rights, patterns of land ownership, forms of the insertion of capital, state policies and technologies come to define a given historical period”.²² In

dustrialization,” *Review (Fernand Braudel Center)* 23, no. 3 (2000): 409–433; Sven Beckert, Ulbe Bosma, Mindi Schneider and Eric Vanhaute, “Commodity frontiers and the transformation of the global countryside: a research agenda,” *Journal of Global History* 16, no. 3 (2021): 435–450. <https://doi.org/10.1017/S1740022820000455>

20. Jason W. Moore, *Capitalism in the web of life: Ecology and the accumulation of capital* (Verso, 2015), 51

21. Ernst Langthaler, “Soy Expansions: China, the USA and Brazil in Comparison,” in Andrea Komlosy and Goran Musić, eds., *Global Commodity Chains and Labor Relations*. (Brill, 2021), 55–80. https://doi.org/10.1163/9789004448049_004

22. Beckert et al., “Commodity frontiers and the transformation of the global countryside”, 8

either case, the concept of commodity frontiers broadens the scope and decentralizes FRA.

Despite its potential, FRA also shows some limitations; first and foremost, its overemphasis on stability and coherence. While FRA concentrates on stable regime phases, the periods in-between remain ‘blind spots’ and are controversially debated. For instance, the transition from the first to the second food regime, an ‘experimental and chaotic era’,²³ as well as the question of whether there was a prolonged crisis of the second food regime or a complete transition to a third one remain unresolved issues.²⁴ Furthermore, the overemphasis on regulatory coherence in the historical trajectory of food regimes fails to recognize national and regional particularities, contestation, and resistance – a point addressed by Friedmann’s recognition of social movements as bottom-up opposition.²⁵ A second limitation emerges from FRA’s ‘modernist ontology’ that perpetuates the society-nature dichotomy rather than challenging and overcoming it.²⁶ Though this critique initiated an ‘agroecological turn’²⁷, FRA adheres to the anthropocentric logic of capitalist development.

23. Harriet Friedmann, “Discussion: moving food regimes forward: reflections on symposium essays,” *Agriculture and Human Values* 26, no. 4 (2009): 335. <https://doi.org/10.1007/s10460-009-9225-6>

24. Magnan, “Food Regimes”, 381-382

25. Goodman and Watts, eds., *Globalising food*, 15-16; Friedmann, “From Colonialism to Green Capitalism”

26. David Goodman, “Agro-Food Studies in the ‘Age of Ecology’: Nature, Corporeality, Bio-Politics,” *Sociologia Ruralis* 39, no. 1 (1999): 19. <https://doi.org/10.1111/1467-9523.00091>

27. Henry Bernstein, “Agrarian political economy and modern world capitalism: the contributions of food regime analysis,” *The Journal of Peasant Studies* 43, no. 3 (2016) 633. <https://doi.org/10.1080/03066150.2015.1101456>

Commodities in socio-technical transitions

The theory of socio-technical transitions emerged in Science and Technology Studies as a combination of evolutionary economics, sociology of innovation, and institutional theory, with a strong ambition towards sustainable transformations²⁸. Despite this normative aspect, the theory provides an analytical toolkit for research on diverse forms of change. Though transition theory has been adapted several times between the early²⁹ and latest versions³⁰, the basic architecture of the multi-level perspective (MLP) has remained intact. The MLP highlights the interplay of three analytical levels: socio-technical systems (formerly framed as ‘regimes’), endogenous niche-innovations, and exogenous landscape.³¹ A socio-technical system comprises material, relational and institutional dimensions: first, techno-economic components and flows, including commodity chains; second, actors and social groups; third, regulatory institutions, both formal and informal (‘regime’). Socio-technical systems are stabilized by techno-economic, socio-cultural and institutional lock-in mechanisms that constrain the actors’ practices towards incremental change (economic growth, technological adaptation, administrative reform, etc.).

28. Frank W. Geels and Derk Loorbach, eds. “Transitions to sustainable development: New directions in the study of long term transformative change.” (Routledge, 2010).

29. Arie Rip and René Kemp, “Technological change,” *Human choice and climate change* 2, no. 2 (1998): 327-399; Frank W. Geels, “Technological transitions as evolutionary reconfiguration processes: a multi-level perspective and a case-study.” *Research Policy* 31, no. 8-9 (2002). 1257–1274.

30. Frank W. Geels and Bruno Turnheim, *The Great Reconfiguration* (Cambridge University Press, 2022).

31. Rip and Kemp, “Technological change”; Frank W. Geels, “Technological transitions as evolutionary reconfiguration processes: a multi-level perspective and a case-study.”

Radical changes, or transitions, of the socio-technical system result from its interplay with niche and landscape levels. The seeds of change are innovative pioneer-activities in the ‘protected spaces’ of niches at the system’s periphery (scientific laboratories, innovative firms, grassroots movements, etc.). However, interactions between niches and socio-technical systems such as anchoring and linking are key to understand how niche-actors and innovations gain momentum.³² The struggles between socio-technical systems and niche-innovations are influenced by the surrounding landscape through secular trends (e.g., economic booms) and sudden shocks (e.g., military conflicts). Socio-technical transitions unfold over time in four phases: first, radical innovations emerge in niches (experimentation phase); second, technical and social innovations build momentum, though struggling with the system’s constraints (stabilization phase); third, exogenous landscape pressures and endogenous niche pressures destabilize the system, thereby opening windows of opportunity for the diffusion of radical innovations (diffusion phase); fourth, diffusing innovations reconfigure the system and become settled in adjusted lock-in mechanisms (reconfiguration phase).³³ Transitions may be successful, but they may also fail if regime-close actors succeed in restabilizing the system. Besides reconfiguration, MLP scholars differentiate alternative transition pathways such as transformation, substitution, and de- and realignment.³⁴

32. Boelie Elzen, Barbara Van Mierlo, and Cees Leeuwis, “Anchoring of innovations: Assessing Dutch efforts to harvest energy from glasshouses.” *Environmental innovation and societal transitions* 5 (2012): 1-18.

33. Geels and Turnheim, *The Great Reconfiguration*, 8-12

34. Frank W. Geels and Johan Schot, “Typology of sociotechnical transition pathways.” *Research policy* 36, no. 3 (2007): 399-417.

Apart from theoretical advancements the MLP has also inspired empirical research, including agro-food studies.³⁵ Agro-food research has adopted MLP to examine current transition pathways towards sustainability.³⁶ Another area of agro-food research emerged out of ethical and political questions such as the ‘justice turn’ addressing the human right to food³⁷ Given that the majority of MLP-based agro-food studies deal with contemporary problems, the historical perspective is underdeveloped. This is surprising, for Geels in his classical outline of the MLP uses historical examples to illustrate his arguments³⁸. Belz’ study on the sustainable transition of Swiss agriculture from 1970

35. Cheng Wang, Tao Lv, Rongjiang Cai, Jianfeng Xu, and Liya Wang, “Bibliometric analysis of multi-level perspective on sustainability transition research,” *Sustainability* 14, no. 7 (2022): 4145; Hamid El Bilali, “The multi-level perspective in research on sustainability transitions in agriculture and food systems: A systematic review.” *Agriculture* 9, no. 4 (2019): 74; Ermann et al., *Agro-Food Studies: Eine Einführung*

36. Daniel Gaitán-Cremaschi, Laurens Klerkx, Jessica Duncan, Jacques H. Trienekens, Carlos Huenchuleo, Santiago Dogliotti, María E. Contesse, and Walter AH Rossing. “Characterizing diversity of food systems in view of sustainability transitions. A review.” *Agronomy for sustainable development* 39 (2019): 1-22; Laura M. Pereira, Scott Drimie, Kristi Maciejewski, Patrick B. Tonissen, and Reinette O. Biggs. “Food System Transformation: Integrating a Political-Economy and Social-Ecological Approach to Regime Shifts.” *International Journal of Environmental Research and Public Health* 17, no. 4 (2020): 1313; Adrian Smith, Jan-Peter Voß, and John Grin. “Innovation studies and sustainability transitions: The allure of the multi-level perspective and its challenges.” *Research Policy* 39, no. 4 (2010): 435–448.

37. C. Clare Hinrichs, “Transitions to sustainability: a change in thinking about food systems change?” *Agriculture and human values* 31 (2014): 143-155; Clair Lamine, Ika Darnhofer and Terry K. Marsden. “What enables just sustainability transitions in agrifood systems? An exploration of conceptual approaches using international comparative case studies.” *Journal of Rural Studies* 68 (2019): 144-146.

38. Frank W. Geels, “Technological transitions as evolutionary reconfiguration processes: a multi-level perspective and a case-study.”

to 2000 is one of the few examples of a historically-oriented MLP.³⁹ Whereas Schermer analyses the transition of the Austrian dairy sector from the mid-1980s to the mid-1990s⁴⁰, Langthaler assesses the impact of the Nazi regime on the agrarian transition in Austria from 1930 to 1960.⁴¹ However, long-term views on agro-food transitions from an MLP are still lacking.

There is a lively debate about the strengths and weaknesses of the MLP. Geels responded to criticism regarding agency, power and cultural discourses, the conceptualization of regime and landscape, the type of change as well as broader methodological, ontological and epistemological questions.⁴² From the perspective of historical agro-food studies, at least two limitations are evident: First, MLP has an anthropocentric bias, thus disregarding the nonhuman agency of animals, plants, and technology that is central to agro-food research. Though the MLP considers ‘agency in the form of ‘bounded rationality (...) and interpretive activities’⁴³, it is restricted to human actors. Moreover, human agency is enshrined in

39. Frank-Martin Belz, “A transition towards sustainability in the Swiss agri-food chain (1970–2000): using and improving the multi-level perspective.” *System innovation and the transition to sustainability* (2004): 97-114.

40. Markus Schermer, “Die Milchwirtschaft in Österreich – ein Beispiel für sozio-technische Transformation. “*Österreichische Zeitschrift Für Soziologie*” 40, no. 1 (2015): 33–51.

41. Ernst Langthaler, “*Schlachtfelder: Alltägliches Wirtschaften in der nationalsozialistischen Agrargesellschaft 1938–1945.*” (2016): 699-754.

42. Frank W. Geels, “The multi-level perspective on sustainability transitions: Responses to seven criticisms,” *Environmental innovation and societal transitions* 1, no. 1 (2011): 24-40; Frank W. Geels, “Socio-technical transitions to sustainability: A review of criticisms and elaborations of the Multi-Level Perspective,” *Current opinion in environmental sustainability* 39 (2019): 187-201.

43. Geels, “The multi-level perspective on sustainability transitions,” 30.

the hierarchical ontology of the MLP as ‘a vertical analytical lens’.⁴⁴ Geels claims that the three levels are not ordered hierarchically, but indicate different degrees of agency and structuration.⁴⁵ Nevertheless, the MLP discards the idea of a flat ontology. Second, among the broad range of observable developments, the MLP narrows down to sustainable transitions.⁴⁶ From a historical perspective, this focus covers neither the multiple pathways of agro-food change, including incomplete and failed transitions, nor regime strategies to contain destabilization and restabilize the system.

Commodities in chains, biographies, and networks

Besides the theories of food regimes and socio-technical transitions, there exist a multitude of commodity-focused approaches of socio-economic, historical, geographical, anthropological, and sociological provenance with regard to chains, biographies, and networks. They deal in different ways with the question of how goods and services as commodities become connected to – and perhaps also disconnected from – production, distribution, and consumption in (pre-)modern capitalism. However, they share the assumption that a commodity focus grants insights into the global economy and its social and natural environments. Therefore, most case studies focus on a particular commodity and trace its development through time and space.⁴⁷

44. Hinrichs, “Transitions to sustainability,” 149.

45. Geels, “The multi-level perspective on sustainability transitions”.

46. Hinrichs, “Transitions to sustainability”.

47. Liena Kano, Eric WK Tsang, and Henry Wai-Chung Yeung, “Global value chains: A review of the multi-disciplinary literature,” *Journal of International Business Studies* 51, no. 4 (2020), 577–622. <https://doi.org/10.1057/s41267-020-00304-2>.

Among chain-oriented approaches, Bair distinguishes between commodity chains in the capitalist world-system, global commodity chains (GCC), and global value chains (GVC), while also mentioning related concepts in agro-food and business studies.⁴⁸ The definition of a commodity chain as a ‘network of labour and production processes whose end result is a finished commodity’ was coined by Hopkins and Wallerstein in the framework of world-systems analysis.⁴⁹ Following a global and long-term perspective, commodity chain analysis highlights the division of labor between world-regions, as well as the associated political and economic dependencies, resulting in inequalities of power and wealth. Furthermore, it identifies cyclical shifts of the core and peripheries in the context of capitalist expansion and contraction, as well as conflicts between empires and states, affecting the configuration of commodity chains.⁵⁰ Gereffi and Korzeniewicz extended this concept to the GCC approach, inspired by organizational sociology and development studies.⁵¹ GCCs comprise four dimensions: input-output structure, geographical configuration, governance structure, and institutional context. GCC re-

48. Jennifer Bair, “Global Capitalism and Commodity Chains: Looking Back, Going Forward,” *Competition & Change* 9, no. 2 (2005): 153–180. <https://doi.org/10.1179/102452905X45382>; Jennifer Bair, “Global Commodity Chains: Genealogy and Review,” in Jennifer Bair, ed., *Frontiers of commodity chain research* (Stanford University Press, 2009), 1–34.

49. Terence K. Hopkins and Immanuel Wallerstein, “Commodity Chains in the World-Economy Prior to 1800”. *Review (Fernand Braudel Center)* 10, no. 1 (1986): 159. <http://www.jstor.org/stable/40241052>.

50. Bair, “Global Commodity Chains”.

51. Gary Gereffi and Miguel Korzeniewicz, eds., *Contributions in Economics & Economic History*, 149: v.No. 149. *Commodity chains and global capitalism* (Praeger, 1994). <http://site.ebrary.com/lib/alltitles/docDetail.action?docID=10377260>.

search focuses primarily on inter-firm networks and the distinction between producer- and buyer-driven chains.⁵² Drawing on the GCC approach, Gereffi et al. moved from GCCs to GVCs, inspired by governance studies and transaction-cost economics.⁵³ GVCs comprise the distribution of economic value and its governance along the chain and provide opportunities for firms to upgrade. The authors distinguish five types of chain governance (market, modular, relational, captive, and hierarchy) that specify the relationship between lead firms and their suppliers.⁵⁴ The concept of global production networks (GPN) arose from the critique of GCC and GVC research from a geographical point of view.⁵⁵ It focuses on the multiscalar dynamics of globalization, including networks of actors at multiple levels (nation states, transnational companies, NGOs, etc.).

Many chain-oriented concepts arose from research on agriculture and food or were applied to agro-food chains. Among genuine agro-food concepts, Friedland's commodity systems analysis has been widely adopted.⁵⁶ Commodity

52. Bair, "Global Capitalism and Commodity Chains".

53. Gary Gereffi, John Humphrey, and Timothy Sturgeon, "The governance of global value chains," *Review of International Political Economy* 12, no. 1 (2005): 78–104. <https://doi.org/10.1080/09692290500049805>.

54. Gereffi et al., "The governance of global value chains".

55. Neil M. Coe, Peter Dicken, and Martin Hess, "Global production networks: realizing the potential," *Journal of Economic Geography* 8 no. 3 (2008): 271–295. <https://doi.org/10.1093/jeg/lbn002>.

56. William Friedland, "Commodity systems analysis: An approach to the sociology of agriculture," in Harry K. Schwarzweller, ed., *Research in Rural Sociology and Development: A Research Annual (Vol. 1)* (JAI Press, 1984), 221–235; William Friedland, "Reprise on Commodity Systems Methodology" *The International Journal of Sociology of Agriculture and Food*, 9 (2001): 82–103. <https://doi.org/10.48416/IJSAF.V9I.346>; William Friedland, "Agrifood Globalisation and Commodity Systems," *The*

systems encompass the mutual interaction of science and technology, agricultural production, industrial processing and marketing, long-distance trade, and food consumption. The concept pays special attention to the features of animal- and plant-based commodities such as crop specificity, seasonality, and perishability, as well as the discrepancies between production time and labor time in the commodification of living organisms. Fine and Leopold's systems of provision approach tries to avoid the 'productivist pitfall' by emphasizing consumption rather than production relations.⁵⁷ The filière approach was motivated by French development policies in current and former colonies, underlining the institutional regulation of commodities.⁵⁸ Chain-oriented concepts have also been applied to agricultural commodities for food or non-food purposes, ranging from basic grains and stimulants to feeding stuffs and animal-based food.⁵⁹

Whereas chain-oriented approaches relate to capitalist economies, the notion of commodification as one stage in the biography of a thing arose mostly from historical and anthropological research in non-capitalist societies. Appadurai replaces the static definition of commodities as goods and services produced for exchange by neoclassical economics by a more dynamic notion. Instead of

International Journal of Sociology of Agriculture and Food, 12 (2004): 5–16. <https://doi.org/10.48416/IJSAF.V12I.319>

57. Ben Fine and Ellen Leopold, *The World of Consumption: The Material and Cultural Revisited* (Routledge, 1993).

58. Bair, "Global Commodity Chains", 3

59. Bernd-Stefan Grewe, "Global Commodities and Commodity," in T. Roy & G. Riello, eds., *Global economic history* (Bloomsbury Academic, 2019), 215–228

being essentially (non-)commodities, things are socially and culturally constructed as such for a certain period in their ‘social lives’. In a programmatic essay, he defines the ‘commodity situation’ in the biography of a thing as ‘the situation in which its exchangeability (past, present, or future) for some other thing is its socially relevant feature’.⁶⁰ This notion includes the ‘commodity phase’ (i.e., the timespan between movements in and out of the commodity state), the ‘commodity candidacy’ (i.e., the society’s cultural framework in which things are conceived as exchangeable), and the ‘commodity context’ (i.e., the variety of social arenas that link the commodity candidacy of a thing to its commodity phase). Accordingly, the exchange value of a commodity is not purely determined by supply and demand of a marketed object, but rather is a matter of social and cultural construction by subjects or *politics* in the broadest sense.⁶¹ Though not following this approach in the strict sense, Mintz’s anthropological classic *Sweetness and Power* on the early-modern transatlantic network of sugar, as well as Beckert’s more recent historical account of the *Empire of Cotton* in the modern era, emphasizes the social and cultural construction of value by different groups of consumers.⁶²

The notion of commodities exerting agency was inspired by actor-network theory (ANT) and further supported by the ‘material turn’ of social sciences and humanities

60. Arjun Appadurai, “Introduction: Commodities and the politics of value,” in Arjun Appadurai, ed., *The social life of things: Commodities in cultural perspective* (10th ed) (Cambridge Univ. Press, 1986), 13

61. Appadurai, “Introduction”, 3

62. Sidney W. Mintz, *Sweetness and power: The place of sugar in modern history* (Viking Penguin, 1985); Beckert, *Empire of cotton*

in general and the ‘animal’ and ‘plant turns’ in particular.⁶³ ANT tries to overcome the hierarchical division of conventional social theory by assuming a ‘flat ontology’ in which humans, as well as nonhuman entities, have agency and constitute ‘more than human’ networks.⁶⁴ Agency is not inherently human, because nonhuman organisms, things, and even ideas can exert agency by affecting other actors within the network.⁶⁵ Accordingly, ‘the social’ is not structured in opposing dualisms such as human-nature, subject-object, micro-macro; it is rather composed of symmetrical layers of associations.⁶⁶ For instance, Latour argues that Pasteur’s discovery of yeast microbes emerged from the interaction between human and nonhuman actors – between the scientist’s research strategies and the substance itself.⁶⁷ Callon applies the theoretical claim of sym-

63. Timothy J. LeCain, *The matter of history: How things create the past. Studies in environment and history* (Cambridge University Press, 2017).

64. Anders Blok, “Actor-Network Theory, Actants,” in George Ritzer, ed., *The Blackwell Encyclopedia of Sociology* (Blackwell, 2022), 1. <https://doi.org/10.1002/9781405165518.wbeosa010.pub2>; Andrew Donaldson, Philip Lowe, and Neil Ward, “Virus-crisis-institutional Change: the Foot and Mouth Actor Network and the Governance of Rural Affairs in the UK.” *Sociologia Ruralis* 42, no. 3 (2002): 202.

65. Birgit Peuker, “Akteur-Netzwerk-Theorie (ANT)”, in C. Stegbauer & R. Häußling, eds., *Netzwerkforschung: Band 4. Handbuch Netzwerkforschung* (VS Verlag für Sozialwissenschaften GmbH, 2010), 326.

66. Georg Kneer, “Akteur-Netzwerk-Theorie,” in Georg Kneer and Markus Schroer, eds., *Handbuch Soziologische Theorien* (VS Verlag für Sozialwissenschaften, 2009), 19. https://doi.org/10.1007/978-3-531-91600-2_2; John Law, “Actor Network Theory and Material Semiotics,” in Bryan S. Turner, ed., *Blackwell companions to sociology. The new Blackwell companion to social theory* (Wiley-Blackwell, 2009), 147. <https://doi.org/10.1002/9781444304992.ch7>; Mike Michael, *Actor-Network Theory: Trials, Trails and Translations* (Sage, 2017), 4.

67. Kneer, “Akteur-Netzwerk-Theorie”, 23; Bruno Latour, *The pasteurization of France* (2. print) (Harvard University Press, 1993).

metry on an empirical level in his study on scallop fishing, arguing that fishermen and scallops formed a ‘more than human’ web of relations in which their individual properties were gained through associations with other actors.⁶⁸

ANT has also been applied to commodity studies, revealing how the properties of animate and inanimate raw materials – for instance, rapeseed, tobacco and soy– fostered or hindered their transformation into marketable products.⁶⁹

ANT’s leitmotif of ‘follow the actors’ provides a methodological guideline for commodity-oriented approaches to chart the constantly changing composition of hybrid networks.⁷⁰ Since ‘the social’ is made of many interwoven actor-networks, sociological research needs to follow these connections and their effects. This guideline has been applied in empirical research, including agro-food studies.⁷¹ For example, Cook’s ‘follow the thing’ approach traces the

68. Michel Callon, “Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay,” *The Sociological Review* 32, no. 1_suppl, (1984): 196–233. <https://doi.org/10.1111/j.1467-954X.1984.tb00113.x>.

69. Lawrence Busch and Arunas Juska, “Beyond political economy: actor networks and the globalization of agriculture,” *Review of International Political Economy* 4, no. 4, (1997): 688–708. <https://doi.org/10.1080/09672299708565788>; Andrew Russell, *Anthropology of Tobacco: Ethnographic Adventures in Non-Human Worlds* (Taylor & Francis, 2019). <https://www.taylorfrancis.com/books/oa-monograph/10.4324/9781351050197/anthropology-tobacco-andrew-russell> <https://doi.org/30596>; Richa Kumar, *Rethinking revolutions: Soybean, choupals and the changing countryside in Central India* (Oxford University Press, 2016). <https://doi.org/10.1093/acprof:oso/9780199465330.001.0001>; Shane Lee Hamilton, “Analyzing Commodity Chains: Linkages or Restraints?” in Warren Belasco and Roger Horowitz, eds., *Hagley perspectives on business and culture. Food chains: From farmyard to shopping cart* (University of Pennsylvania Press, 2009), 20.

70. Russell, “Anthropology of tobacco”, 13.

71. Ermann, *Agro-Food Studies: Eine Einführung*, 104.

webs of consumption goods step-by-step back to the realms of production.⁷² Taking ANT as a methodology rather than a theory, it provides a compass to ‘follow the commodities’ along the links and nodes of their dynamic webs.⁷³

Even though commodity-focused approaches - be they oriented towards chains, biographies or networks - certainly have their merits, they also suffer from some shortcomings. One crucial limitation concerns the emphasis by chain-oriented approaches on already established commodity chains, while widely neglecting their formation, dissolution and reconfiguration over longer periods of time.⁷⁴ Appadurai’s interest in moves into and out of the commodity phase addresses this deficit, but not systematically.⁷⁵ Another limitation concerns ANT’s tendency to overestimate symmetry, agency, and flat ontology. This disregards inherent information asymmetries regarding actor-networks, for most sources about nonhuman actors are framed by a human perspective.⁷⁶ Moreover, the flat ontology can obscure the view of ambiguities and distinctive characteristics of actors that directly impact their capacity for agency. For instance, animals can move around,

72. Ian Cook, Philip Crang, and Mark Thorpe, “Biographies and geographies: consumer understandings of the origins of foods,” *British food journal* 100, no. 3 (1998): 162-167; Ian Cook and Michelle Harrison, “Follow the Thing: “West Indian Hot Pepper Sauce”,” *Space and Culture* 10, no. 1 (2007): 40–63. <https://doi.org/10.1177/1206331206296384>.

73. Michael Carolan, *The sociology of food and agriculture* (Routledge, 2016), 39; Friedland, “Reprise on Commodity Systems Methodology”, 91.

74. Ponte, Stefano, Gary Gereffi, and Gale Raj-Reichert, eds. *Handbook on global value chains* (Edward Elgar Publishing, 2019). <https://ebook-central.proquest.com/lib/kxp/detail.action?docID=5968320>.

75. Appadurai, “Introduction”.

76. Kneer, “Akteur-Netzwerk-Theorie”, 35-36.

plants are stationary, and humans use complex language, high technology and show morality and motivations, etc.⁷⁷ Finally, symmetrical approaches potentially underestimate inequalities of access to power and wealth between core and peripheral actors, thus neglecting structural hierarchies inherent in networks.⁷⁸ Chain-oriented approaches with their emphasis on lead firms, hegemonic states or labor movements might outweigh these imbalances, but only partially.

THE TRIAD OF COMMODITY STUDIES

Contributions by food regime analysis

FRA has the potential to reduce or even overcome the limitations of transition theory and commodity-focused approaches. The MLP overemphasizes sustainable transitions, thus neglecting the multiple pathways of agro-food change, including incomplete and failed transitions. Moreover, it underestimates the regime's strategies to contain destabilization and restabilize the system. In contrast, FRA emphasizes lock-ins and path dependencies as well as its regulatory framework, which, together with core actors, stabilizes the prevailing mode of capital accumulation in global commodity chains.⁷⁹ Thereby, it allows an explanation of how a food regime maintains relative stability over

77. Russell, "Anthropology of tobacco", 10.

78. Michel Callon and John Law, "Agency and the Hybrid Collectif," in Barbara Herrnstein Smith & Arkady Plotnitsky (Eds.), *Duke backfile. Mathematics, science, and postclassical theory* (Duke University Press, 1997), 96.

79. Stan J. Liebowitz and Stephen E. Margolis, "Path Dependence, Lock-In, and History," *SSRN Electronic Journal*, Advance online publication (1995). <https://doi.org/10.2139/ssrn.1706450>.

several decades. In contrast to the bottom-up orientation of the MLP, FRA is more receptive to top-down dynamics in regime transitions. Examples are the impact of government intervention, such as the New Deal policy in the USA during the transition to the second regime, or the influence of international organizations, such as the GATT/WTO, during the transition to the third regime. Finally, FRA helps to tone down MLP's analytical bias towards sustainable transitions, since it points out the establishment of less sustainable modes of agricultural production and food consumption in recent history ('metabolic rift'). For all these reasons, FRA allows mitigation of the deficits of the MLP.

Besides its contributions to the MLP, FRA might also counterbalance ANT's affinities to flat ontology, symmetry, and agency. With its roots in world-systems analysis and regulation theory, FRA pronounces political and economic asymmetries ingrained in state power and transnational capital. Though FRA acknowledges room to maneuver for grassroots initiatives, such as the food sovereignty movement, it follows a hierarchical rather than a flat ontology that identifies core areas and (semi-)peripheries within a global web of political and economic dependencies. For instance, FRA regards the expansion of genetically-modified seeds since the 1990s as a result of accumulation strategies by biotech companies and business-friendly state regulation, rather than plant agency.⁸⁰ In sum, the cooperation of ANT and FRA allows the combination of bottom-up and top-down dynamics, agency and structuration, and flat ontology and hierarchical relations.

80. Gabriela Pechlaner, *Corporate crops: Biotechnology, agriculture, and the struggle for control* (Univ. of Texas Press, 2012).

Contributions by transition theory

Transition theory in general and the MLP in particular provide a flexible set of concepts that can minimize or even overcome the limitations of FRA and commodity-focused approaches. Since FRA concentrates on a hegemonic regulatory framework that safeguards capital accumulation on a global level, the periods in between the regimes are analyzed with less effort. These 'blind spots' are at the center of MLP research and its notion of socio-technical transitions. Despite the diverging conceptions of 'regime' – the interplay of capital accumulation and regulation in FRA and the institutional 'rules of the game' in the MLP –, the two approaches complement each other. Accordingly, a food regime comprises the socio-technical system and parts of the landscape (e.g., society-nature relations). Moreover, the spatially more flexible definition of systems as well as the addition of niche interactions provide FRA with more sensitivity to (sub-) national and even regional and local levels. As the globalist tendency of food regime theory has been criticized for complicating empirical research⁸¹, the MLP provides a toolbox for downscaling macro-level frameworks such as FRA to meso- and micro levels. Therefore, the MLP adds flexibility to FRA both ontologically and methodologically.

Besides its contributions to FRA, the MLP also considers problems arising from commodity-focused approaches. Research on GCCs, GVCs and GPNs mostly deals with the dynamics of already established commodity chains.⁸² The MLP provides a suitable framework to examine the

81. Jostein Jakobsen, "New food regime geographies: Scale, state, labor," *World Development*, 145, (2021): 105523. <https://doi.org/10.1016/j.worlddev.2021.105523>.

82. Pontet et al., *Handbook on global value chains*.

formation, reconfiguration, and dissolution of commodity chains over longer periods of time. This goes beyond the conception of development by innovation represented by global innovation networks.⁸³ The MLP stresses the ‘making-of’ rather than the status quo, especially the experimentation, stabilization, and diffusion of marketable niche-innovations that drive the (re-)configuration of commodity chains as parts of socio-technical systems. Through these niche-system interactions, novelties from protected spaces create new commodity chains, enter established ones or replace them completely. However, the diffusion of innovations may clash with the existing regime, leading to throwbacks of innovative commodities. Therefore, the formation, dissolution, and reconfiguration of commodity chains unfolds in contested and contingent rather than smooth and predictable ways.

Contributions by commodity-focused approaches

Commodity-focused approaches may tackle a joint problem arising from both FRA and MLP research: their adherence to the society-nature dichotomy and their hierarchical ontology. The ‘modernist ontology’ of FRA, focusing on capitalist development in the age of globalization, as well as the anthropocentric bias of the MLP, focusing on socio-technical innovations, are crucial limitations for agro-food studies that investigate animate and inanimate materialities. Dealing with agro-food development – understood as co-evolution of society and nature – requires the integration of nonhuman actors in the theoretical framework.

83. Philip Cooke, “Global Production Networks and Global Innovation Networks: Stability Versus Growth,” *European Planning Studies* 21, no. 7 (2013): 1081–1094. <https://doi.org/10.1080/09654313.2013.733854>.

ANT widens the scope of FRA and MLP research not only ontologically, through the concept of ‘more than human’ actor-networks, but also methodologically, through the guideline to ‘follow the actors’.

A related issue arises from the hierarchical ontology of FRA and the MLP. ANT and other practice theories allow the reconnection of what has been disconnected – core and periphery in the case of FRA, niche, system and landscape in the case of the MLP – through the notion of a flat ontology. Flat ontology means that the investigated reality consists of entities arranged on the same rather than on different levels.⁸⁴ However, this notion does not necessarily exclude hierarchies. They can be conceptualized as nodes with different access to power and wealth within a transversal network. From this ANT-inspired perspective, the distinction of core and periphery as well as niche, system, and landscape are analytical rather than ontological. In ANT terms, these labels are only manifestations of hierarchically ordered actor-networks that are constantly being renegotiated. This idea demands the mitigation of the structuralist notion inherent to FRA and MLP research through ANT’s emphasis on agency, both human and non-human, within hybrid actor-networks.

General framework and research-specific operationalization

We argue that FRA, transition theory and commodity-focused approaches, sometimes conceived as competing approaches, prove to be mutually complementary. These complementary interrelations constitute an integrated

84. Theodore Schatzki, “Practice theory as flat ontology,” in Gert Spaargaren, Machiel Lamers and Don Weenink, eds., *Practice theory and research: Exploring the dynamics of social life* (Routledge, 2016), 28–42.

framework that is more than the sum of its parts. We call this framework the *triad of commodity studies* (Figure 1). According to the triadic logic, the three approaches are mutually interwoven: each of them is necessary for the whole and none of them is sufficient in itself. These links are connected as follows: FRA overcomes one of the limitations of transition theory – namely the overemphasis on sustainable transitions – through its focus on lock-ins and path dependencies (arrow 1). Moreover, it tackles one of the shortcomings of commodity-focused approaches – namely the overestimation of symmetry, agency, and flat ontology – through its emphasis on political and economic inequalities (arrow 2). Transition theory overcomes one of the limitations of FRA – namely the focus on regime periods – through highlighting crises and transitions (arrow 3). Moreover, it tackles one of the shortcomings of commodity-focused approaches – namely the limitation to already established commodity chains – through investigating their formation, dissolution and reconfiguration over longer periods of time (arrow 4). Commodity-focused approaches overcome one of the limitations of FRA and MLP research – namely the modernist society-nature dichotomy – through the notion of ‘more than human’ actor-networks. Moreover, they tackle one of the joint shortcomings – namely a hierarchical ontology – through a flat ontology (arrows 5 and 6).

The triad of commodity studies provides a compass for exploring the history of capitalism through a particular commodity (‘following the commodity’). However, this general framework has to be adapted to the particular research needs. In the project *SoyChange*, we investigate the dynamics of food regimes and their transitions since the 1870s through the lens of soy. Nestled between global

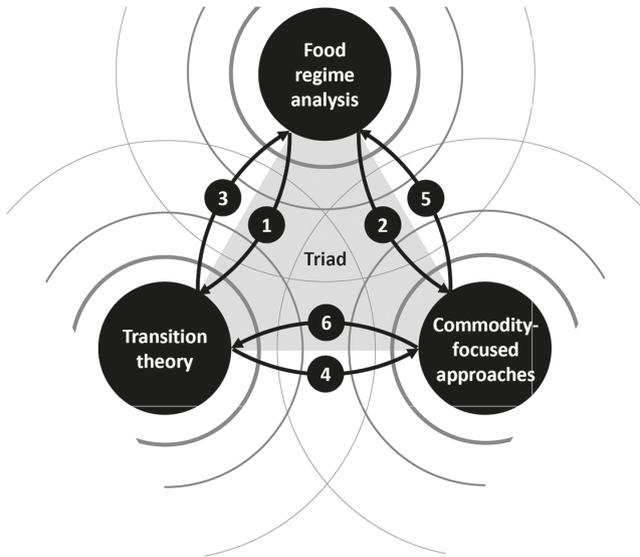


Fig. 1. The triad of commodity studies

Arrow 1: lock-ins and path dependencies; arrow 2: political and economic inequalities; arrow 3: crises and transitions; arrow 4: formation, dissolution and reconfiguration of commodity chains; arrows 5 and 6: 'more than human' actor-networks and flat ontology.

and regional approaches, our project focuses on Austria as a country case in its inter- and transnational setting. The project's heuristic framework operationalizes the triad of commodity studies according to our research interests. From a synchronic view, a food regime (or what the MLP would call 'agro-food system') comprises *commodity chains* that extract value from land and labor, formal and informal *regulatory institutions* that are executed by diverse actors (agencies, companies, movements, etc.), and

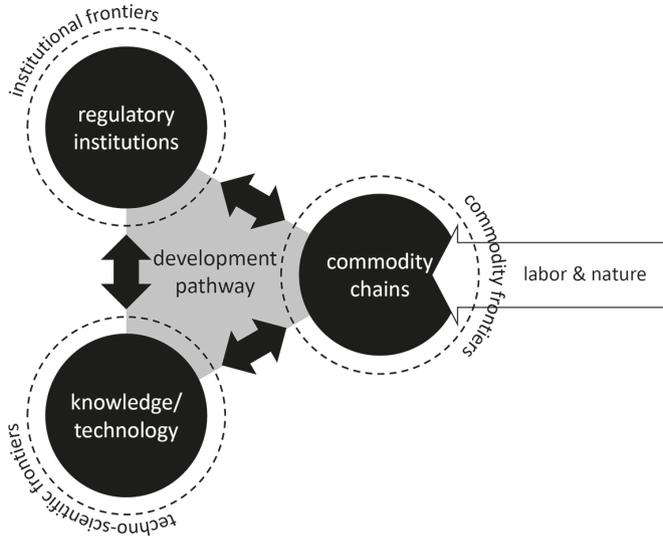
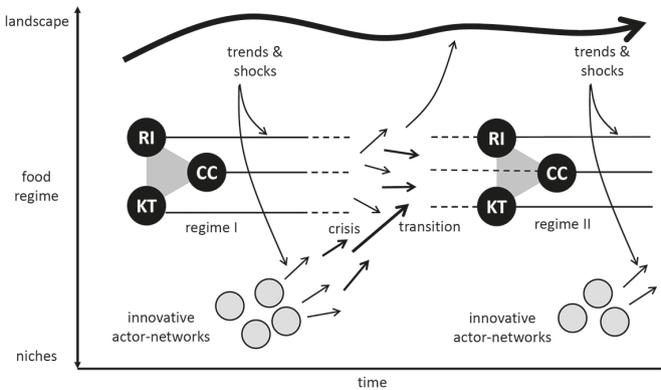


Fig. 2. Heuristic framework of the SoyChange project (synchronic view)

knowledge and technology that circulate between experts and society. Each of these elements has frontiers of its own that may expand or contract, depending on endogenous and exogenous dynamics (Figure 2). From a diachronic view, the development pathways of food regimes comprise periods of relative stability with incremental change as well as periods of destabilization, crisis, and transition that result in radical change. Destabilization, crisis, and transition emerge from pressures on the regime by trends and shocks from the landscape as well as innovative actor-networks diffusing from their niches into commodity chains (Figure 3). How the ideal-typical pathways of agro-food development take shape in practice is a question to be answered by empirical research.

Conceptualizing Historical Commodity Studies: The Case of Soy



CC: commodity chains, RI: regulatory institutions
KT: knowledge and technology

Fig. 3. Heuristic framework of the SoyChange project (diachronic view)

THE CASE OF SOY

Soy as state-supported commodity

From the perspective of FRA, soy emerged in the 20th century as a state-supported commodity that nowadays has reached the top position of agricultural world trade. During the twentieth century, soy expanded externally (i.e., through the enlargement of the cultivated area), internally (i.e., through the technologically-driven increase of land productivity), and flexibly (i.e., both externally and internally) at regional commodity frontiers, thereby advancing from the margins to the cores of global agro-food chains. As a standardized commodity, it became a major source of revenue, especially for agrobusiness firms and national

budgets. However, soy-based globalization also placed a heavy burden on society and nature.⁸⁵

Soy's emergence as a global commodity was driven by successive food regimes and their associated key actors. Marketization, integral to the British-centered food regime (1870s–1920s), paved the way for soy to enter the global stage. International trading corporations in the slipstream of Japanese imperialism met the demand of European industrial classes for overseas resources through supplies of cheap soy extracted at the externally expanding Manchurian frontier. Among the counter-movements to classical-liberal capitalism – with Nazi Germany promoting soy as a cornerstone of food autarky – the USA and the USSR rose to hegemony of bipolar food regimes in the Cold War.⁸⁶ In the second food regime (1940s–1970s) cheap soy from the internally expanding frontier in the US Midwest and South served as a geopolitical weapon of American-style development, including 'meatification', in Western Europe, Japan, and the 'Third World'.⁸⁷ Transnational agribusinesses in coalition with export-oriented countries undermined

85. Ernst Langthaler, "Broadening and Deepening: Soy Expansions in a World-Historical Perspective," *Historia Ambiental Latinoamericana Y Caribeña (HALAC) Revista De La Solcha* 10, no. 1 (2020) 244–277. <https://doi.org/10.32991/2237-2717.2020v10i1.p244-277>; Langthaler, "Soy Expansions".

86. Joachim Drews, "Die "Nazi-Bohne": Anbau, Verwendung und Auswirkung der Sojabohne im Deutschen Reich und Südosteuropa (1933 – 1945), Diss, Hannover University, 2002," *Politik und Geschichte: Vol. 4* (Lit Verl., 2004); Ines Prodöhl, "Versatile and cheap: a global history of soy in the first half of the twentieth century." *Journal of Global History* 8, no. 3 (2013) 461–482.

87. Christine M. Du Bois, "Social context and diet: Changing soy production and consumption in the United States," in Christine M. Du Bois, Chee-Beng Tan and Sidney W. Mintz, eds., *The world of soy* (NUS Press, 2008), 208–233; Matthew Roth, *Magic bean: The rise of soy in America* (University Press of Kansas, 2018).

state-organized capitalism and enforced another wave of marketization, culminating in the WTO-centered food regime (from the 1990s). Cheap soy from the flexibly expanding frontier in South America challenged US dominance in global markets, especially in reunified Europe and post-reform China. Simultaneously, soy expansion in near-natural biomes disrupted human and non-human habitats and provoked counter-movements to neoliberal capitalism.⁸⁸

Soy as techno-scientific innovation

The MLP highlights soy as a techno-scientific innovation that diffused into the agro-food system in connection with national governments and agrobusiness firms. The transition from the first to the second food regime provides a telling case: The closing of the westward-moving ‘American frontier’ in 1890 reoriented US agricultural development from the extension of European-style farming, based on nutrient mining on former prairie grasslands, to more intensive and sustainable land uses. In the 1920s, a niche-network of research and extension agencies, soy farmers’ organizations and oilseed-processing companies emerged in Illinois and other Corn Belt states around soy as an exotic plant. In the 1930s, the transition to capital-intensive farming based on fossil energy opened a window

88. Ernst Langthaler, “Great Accelerations: Soy and its Global Trade Network, 1950–2020,” in Claiton Marcio and Claudio de Majo, eds., *The Age of the Soybean: An Environmental History of Soy During the Great Acceleration* (White Horse Press, 2022), 65–90; Pablo Lapegna, *Soybeans and power: Genetically modified crops, environmental politics, and social movements in Argentina. Global and comparative ethnography* (Oxford University Press, 2016); Mariano Turzi, *The political economy of agricultural booms: Managing soybean production in Argentina, Brazil, and Paraguay* (Palgrave Macmillan, 2017). <https://ebookcentral.proquest.com/lib/kxp/detail.action?docID=4744593>.

of opportunity for adapted soy varieties in rotation with hybrid corn. Moreover, state management of the economic and ecological crisis of US agriculture, the Great Depression and the Dust Bowl, promoted soy as a counteragent to the erosion of both farm prices and soils. Henry Ford's obsession with soy as a raw material for automobile manufacturing caused a sensation in the press, but never proceeded far beyond the experimental stage. More importantly, wartime management of scarce fats and oils encouraged farmers to grow price-subsidized oilseeds, including soy, for food purposes in order to save scarce tropical oils for military use. After the war, the state-led deposition of soy surpluses in domestic and world markets further fueled the growth of the US soy complex.⁸⁹

In the transition from the second to the third regime, soy as techno-scientific innovation emerged in South America. In Brazil, for instance, soy built a niche as a key commodity of the ambitious project of 'conservative modernization,' implemented by the military regime in the mid-1960s for fiscal and geopolitical reasons. Cooperative research with US foundations and state-led development programs expanded the soy business from the core regions with moderate climate in the very south of the country to more peripheral tropical areas in a northern direction (e.g., Mato Grosso), thereby converting near-natural biomes into 'agricultural deserts' and displacing indigenous and peasant communities. Political and economic restructuring in the late 1980s and early 1990s, according to the democratic government's neoliberal agenda in the Mercosur free-trade zone, permitted transnational companies to acquire large

89. Du Bois, "Social context and diet"; Roth, *Magic bean*.

tracts of the Brazilian soy complex. The availability of a biotechnological package, comprising genetically-manipulated seeds and a herbicide they are resistant to, from the mid-1990s onwards simplified and cheapened soy cultivation and further accelerated the frontier expansion in savanna and rainforest areas.⁹⁰

Soy as protagonist-antagonist

From an ANT perspective, the soybean in association with other human and nonhuman actors played an active role in its emergence as a global commodity. Through its properties as a plant domesticated in East Asia some millennia ago, *Glycine max* both enabled and limited interaction with the rest of ‘socio-nature’, the hybrid networks of human and non-human actors. Soy’s properties comprised both strengths (e.g., nitrogen fixation in the soil in symbiosis with bacteria) and weaknesses (e.g., vulnerability to weeds due to slow maturation). Given its unique combination of nutrients – 25 to 45 percent protein and 15 to 20 percent fat – the crop eluded a clear definition. Depending on the dominant usage, its classification oscillated between ‘pulse’ and ‘oilseed.’ In connection with other elements (crop rotation, farm technologies, labor relations, management strategies, market links, etc.), soy shaped specific styles and more general modes of farming. Because of its versatility, the ‘miracle bean’ also served political and economic powers (e.g., as ‘flex crop’ used for food, feed, or fuel) or allied with civic counter-movements (e.g., as

90. Lapegna, *Soybeans and power*; Gustavo Oliveira and Susanna Hecht, “Sacred groves, sacrifice zones and soy production: globalization, intensification and neo-nature in South America,” *The Journal of Peasant Studies* 43, no. 2 (2016): 251–285. <https://doi.org/10.1080/03066150.2016.1146705>; Turzi, *The political economy of agricultural booms*.

sustainable, ethical, and healthy ‘whole food’). In short, soy’s role in such ‘more-than-human’ networks involved shifting attributions and alliances.⁹¹

Soy was not only driven by food regimes and their transitions, but also acted as a driver of state and corporate projects of agro-food globalization. Soy derived its crucial strength in ‘more-than-human’ networks from its flexibility as both a fat- and a protein-supplying commodity, enabling quick adaptations to changing market situations. In the first food regime, Manchurian soybean oil switched from being a by-product of the regional soybean cake trade to a main product for the European market. Attempts to exploit the residual cake succeeded in the second food regime, when soy-based compound feed from the USA became established as the main product for overseas markets. In the third food regime, new soy-exporting countries successfully marketed soybean cake as animal feed, while food and biofuels industries exploited the residual oil. Besides soy’s strengths, its weaknesses affected the crop’s commodification as well. Most importantly, the plant’s vulnerability to weeds during early maturation paved the way for technological optimization of commercial soy farming: from machinery and herbicides for mechanical and chemical weed control to the biotechnological package of transgenic seeds and herbicides. While promoted as an easy and cheap way to raise profitability, the emergence of herbicide-resistant ‘superweeds’ on soy fields made the application of the biotechnological package more difficult and costly.⁹²

91. Sidney W. Mintz, Chee-Beng Tan, and Christine M. Du Bois, “Introduction: The significance of soy,” in Christine M. Du Bois, Chee-Beng Tan, and Sidney W. Mintz, eds., *The world of soy* (NUS Press, 2008), 1–33.

92. Langthaler, “Soy Expansions”.

However, soy's versatility enabled it not only to serve key actors of the prevailing food regime, but also to ally with counter-veiling forces. For instance, the counter-culture to Western lifestyles, represented by Frances Moore Lappé's (1971) *Diet for a Small Planet*, hailed vegetarian soyfoods as an alternative to meat-rich diets. Soy-oriented utopias proclaimed by the hippie culture were not only successors of earlier alternatives, such as the dietary doctrines of the Seventh-day Adventists in the late nineteenth century, but also forerunners of later alternatives, such as middle-class vegetarianism in the early twenty-first century. These examples highlight soy's considerable agency within 'more-than-human' networks, which reached beyond state and corporate projects. The 'soy paradox' – the crop's dual role as both protagonist and antagonist of the prevailing food regime – indicates alternative routes of soy-based agro-food globalization.⁹³ To what extent the 'soyacene' and its severe burden on society and nature can be countered by movements envisioning a more responsible way of connecting with soy in face of the current socio-natural crisis remains to be seen.⁹⁴

CONCLUSION

In this chapter, we have developed an integrated framework for historical commodity studies and applied it to the case of soy. First, we outline different approaches to historical

93. Ernst Langthaler, "The Soy paradox: The Western nutrition transition revisited, 1950-2010," *Global Environment* 11, no. 1 (2018): 79–104. <https://doi.org/10.3197/ge.2018.110105>.

94. Claiton Marcio Da Silva, and Claudio de Majo, eds., *The Age of the Soybean: An Environmental History of Soy During the Great Acceleration* (White Horse Press, 2022). <http://www.jstor.org/stable/j.ctv309h1fx>.

commodity studies that are especially relevant to agro-food issues: FRA, which highlights capital accumulation and its regulation; the MLP, which explains socio-technical transitions as interplay of top-down and bottom-up dynamics; and approaches stressing commodity chains, commodity biographies, and actor-networks. Second, the assessment of strengths and weaknesses of these approaches shows that FRA, the MLP, and commodity-focused approaches, sometimes conceived as competing approaches, prove to be mutually complementary. Taken together in an integrated way, they constitute the triad of commodity studies that serves as a compass for explorations in the history of capitalism through a particular commodity. From this general framework, we operationalize a research-specific framework. Third, the case of soy reveals that each of the three partial perspectives highlights a different, though limited aspect of this commodity: FRA portrays soy as an instrument of state and corporate projects; the MLP identifies niches from which soy diffused into the food regime during transitions; ANT highlights soy's agency in state- and capital-driven marketization and alternative counter-movements. Only if we take these partial approaches as a triadic whole can we grasp soy's multiple roles as state-supported commodity, socio-technical innovation, and protagonist-antagonist that jointly co-determine pathways of capitalist development.

We do not claim that our integrated framework completely removes the dualism of materialist and culturalist approaches. However, we hope to carry forward the discussion about commodity-focused approaches in the social sciences and humanities in general and in the 'new history of capitalism' in particular. Future research on particular commodities might reveal the potentials and limits of the integrated framework developed here.

Four Regimes of Value in the History of Greek Tobacco, 1871-1981

Juan Carmona-Zabala

*“How is the grading done?”
“In the past each commissioned buyer would do it,
according to his mood and interests. After big struggles,
we got the law on grading passed. So the grading is done
today by a committee formed by one representative of
the farmers, one of the cigarette industry and one of the
National Tobacco Board. In practice, however, the one
who grades the tobacco is the person from the Board, who
follows the orders that he is given.”*

This excerpt from a 1977 press report on the tobacco farmers of the region of Phthiotis exemplifies how their economic grievances had much to do with the process of as-

1. “Δύσκολη η κατάσταση των καπνοπαραγωγών,” *Ριζοσπάστης*, 14 April 1977, 6.

sessing the quality of their tobacco. The problem was not just that a farmer might find his tobacco's grade unfairly low. The question of who had the power to assign the grade, and based on what procedure, often featured prominently in demands of farmers' organizations. At a tobacco growers' rally organized in the region of Larissa that same year, demands included the participation of a representative of the farmers in the grading process.² In 1979, Macedonian farmers' organizations demanded that the grade range of 30 to 100 be limited to 60 to 100. That would automatically guarantee a higher grade for lower-quality tobaccos.³ What at first sight might look like bureaucratic pettiness was, in fact, a matter of great importance for farmers. The official grade of their product would decisively affect the sums of money that they would later receive, in the form of sale prices on the market and as state subsidies.

That the grading, and therefore the value, of Greek tobacco in the 1970s was a bone of political contention should not surprise us. Nor should we think of this as a phenomenon stemming from some kind of postwar Greek idiosyncrasy. The political dimension of value in many different historical and cultural contexts has been the object of anthropological interest for several decades. In his introduction to *The Social Life of Things*, by now part of the canon in the scholarship on commodities, Arjun Appadurai argued that commodities acquire their value at the point of exchange, and that the link between exchange and value is ultimately political. Appadurai calls the conditions

2. "Οι καπνοπαραγωγοί νομού Λάρισας ζητούν βασικά μέτρα προστασίας," *Ριζοσπάστης* 11 January 1977, 10.

3. "Σε αγωνιστική ετοιμότητα οι καπνοπαραγωγοί," *Ριζοσπάστης*, 21 January 21 1979, 16.

under which objects become commodities and circulate *regimes of value*. People participate in these regimes on unequal terms, which are subject to challenge and redefinition over time.⁴

In this text, I present four different regimes of value that tobacco leaves, Greece's most important export commodity for much of the twentieth century, went through over a period of roughly a hundred years. Understanding these regimes and, even more importantly, the shifts from one regime to the next, can tell us quite a bit about the evolution of Greek society and the Greek state over time, as well as the relationship between them. This observation is in line with two propositions that are central to actor-network theory. The first is that societies consist of relationships that do not only involve humans, but also non-human objects and organisms. The second is that, over time, non-humans play increasingly important, and complex, roles in the formation and stabilization of social relations.⁵

At the starting point of this narrative, the late nineteenth-century Greek state was interested in little more than monitoring tobacco for the sole purpose of taxing it. At the end of the period that I am covering, i.e., shortly before Greece's accession to the European Economic Community, a complex web of social relations determined what types of tobacco would be produced and exchanged, and in

4. Arjun Appadurai, "Introduction: Commodities and the Politics of Value" in *The Social Life of Things: Commodities in Cultural Perspective*, ed. Arjun Appadurai (Cambridge: Cambridge University Press, 1988), 3-6.

5. Jonathan Murdoch, "Towards a Geography of Heterogeneous Associations," *Progress in Human Geography* 21, no. 3 (1997): 321-337; Bruno Latour, "Pragmatogonies: A Mythical Account of How Humans and Non-humans Swap Properties," *The American Behavioral Scientist* 37, no. 6 (1994): 791-808.

what terms. Explaining how this came to be is the purpose of this text. It is not possible, within the constraints of a book chapter, to account for the historical trajectories of all the social relations relevant to tobacco production, trade, and consumption over such a long time span, even in a small country like Greece.

For this reason, I shall limit my analysis to the issue of value at the point of exchange between farmers and tobacco leaf trading firms, while focusing on national and subnational-level actors. For the sake of analytical parsimony, I pay less attention to supranational actors, such as transnational cigarette manufacturing corporations, or institutions such as the GATT regime or the emerging European trading bloc.

Value was, as I have already indicated, a bone of contention between interested parties (producers, trading firms, state officials, agricultural experts, and so on) at different times. One contentious aspect of value was quantitative. The question of how much value was present in a given amount of tobacco could be answered either in explicitly quantifying terms (prices, grades, categories), or in reference to something else (more or less valuable than a specific other tobacco or a specific other crop).

Another contentious aspect was qualitative, and varied according to circumstances and perspectives. Tobacco could, in some cases, be the main source of livelihood for the rural household, while in others it could contribute additional income within a more diversified familial economy. From the state's standpoint, it could be a formidable source of tax revenue, but also of hard currency that could propel future development, or satisfy the immediate need of the population for imported goods.

In a more negative light, the persistence of tobacco production into the 1970s was at times seen as evidence of the failure of Greece's agricultural sector to modernize by shifting to crops with a more promising future. Here, I follow the literature on Global Production Networks, which proposes that different stakeholders involved in the production of goods for global markets have different understandings of what the value of such goods consists of.⁶

Disagreements over *how much value* tobacco had were connected to the question of *which role* tobacco played, or should play, in Greek society. Which perception would carry the day at any given moment was ultimately a political question.

NINETEENTH-CENTURY LIBERAL REGIME TOBACCO AS A CASH CROP

The territory that became the Kingdom of Greece in the 19th century inherited a pattern of land use where commercial crops were relatively prominent, especially those that required intensive use of labor. Such was the case of silk cocoons, raisins, and tobacco. The supply of basic foodstuffs, such as grains or animal feed, required substantial imports. While commercial crops were an important part of Greece's export trade throughout the 19th century, cash-crop monoculture, let alone large-scale plantations, never became the dominant model of farming. With the exception of some areas that would

6. Neil M. Coe and Henry Wai-chung Yeung, *Global Production Networks: Theorizing Economic Development in an Interconnected World* (Oxford: Oxford University Press, 2015), 35.

specialize in currant monoculture, commercial farming was a supplement that fulfilled the rural household's need for cash.⁷

In some local economies, income from tobacco production was very important. At the national level, tobacco did not yet represent a large share of overall agricultural output. The regions of Macedonia and Thrace, which produced large amounts of this crop, would only become part of the Greek state after the Balkan Wars (1912-1913) and World War I, respectively. Already with the annexation of Thessaly in 1881, however, the crop became an important component of Greece's export trade.⁸

The fact that tobacco was a cash crop meant that the 19th-century Greek state would not grant it the fiscal protections reserved for products deemed necessary for the survival of the small rural household. Support for family farming in the form of some very limited tax exemptions on basic subsistence products, as well as protection from eviction, were the only partial counterweight to the most important priority of agricultural policy at the time: increasing tax revenue. Successive governments passed legislation seeking to improve the state's capacity to assess the taxable products of agriculture, and secure efficient collection by limiting the share absorbed by tax farmers and/or opportunistic state officials.

These criteria informed the debates within political elites over questions such as whether tax farmers or civil servants should be in charge of these tasks, or wheth-

7. Sokrates Petmezas (Σωκράτης Πετμεζάς), *Η ελληνική αγροτική οικονομία κατά τον 19ο αιώνα. Η περιφερειακή διάσταση* (Heraklion: Πανεπιστημιακές Εκδόσεις Κρήτης, 2003), 303-304.

8. Petmezas, *Η ελληνική αγροτική οικονομία*, 66.

er creating a land registry was an endeavor worth its cost. The same applies to the question of whether taxes should be calculated based on the amount of cultivated land, the volume of the goods produced, the number of working animals, or the farmer's income. The state did little, if anything, to develop the countryside's productive capabilities.⁹

Crops cultivated for their commercialization as commodities have the advantage, from the point of view of the state, of being comparatively easier to monitor at some point downstream in the commercial chain, rather than at the site of production. As the commercialization of Greek tobacco and other goods expanded beyond national markets in response to international demand, it became easier for the state to tax them in custom houses. In the case of tobacco, the shift away from the land tax mechanism took place in 1871.¹⁰

From 1889 onward, taxes would also be applied on tobacco consumption, as the state monopolized the right to cut tobacco leaf for the production of manufactured goods.¹¹ Manufacturers of cigarettes and other tobacco products had to cut the leaf at state-owned facilities known as "tobacco factories" (*kapnergostasia*).

Before World War I, the question of how much a certain amount of tobacco was worth had a straightforward answer; it was agreed upon between the farmer and the merchant in the form of a price. Later, either at the customs house or at the tobacco factory, a state official would

9. Petmezas, *Η ελληνική αγροτική οικονομία*, 66.

10. Petmezas, *Η ελληνική αγροτική οικονομία*, 66.

11. Petmezas, *Η ελληνική αγροτική οικονομία*, 66-67.

tax the tobacco based on its weight only. The tax code did not yet take its price or quality into account.¹²

In 1886, agronomist Panagiotis Gennadios published a book on the history, cultivation and on-farm processing of tobacco. Considering his position as Inspector of Agriculture, he most probably was well acquainted with the state's approach to the crop. It is quite telling that the annex of the book, which compiles the relevant legislation on tobacco at the time, only contains laws referring to taxation.¹³

Once Greek tobacco left the country to become the raw material of cigarette manufacturing in places such as Egypt or Britain, its value as a commodity would acquire additional layers of complexity. Greek tobacco varieties belonged to the broader category known as Oriental tobacco, of which the Ottoman Empire exported the largest amounts and highest qualities until World War I. Greek businessmen based in Egypt played an important role in popularizing cigarettes manufactured from Oriental tobacco in the north African country. In a number of European countries and the United States, Egyptian cigarettes, sometimes also known as Turkish or Oriental cigarettes, were highly valued. As importing countries raised tariffs on finished tobacco products in the early twentieth century, Greek businessmen either relocated their manufacturing

12. From an institutional point of view, the case of tobacco is similar to that of currants, Greece's most important export commodity in the nineteenth century, before the commodity entered such a deep state of crisis that the state had to intervene in the currant market. Petros Pizaniias (Πέτρος Πιζάνιας), *Οικονομική ιστορία της ελληνικής σταφίδας, 1851-1921. Παραγωγή, διεθνής αγορά, διαμόρφωση τιμών, κρίση* (Athens: Ίδρυμα Έρευνας και Παιδείας της Εμπορικής Τράπεζας της Ελλάδος, 1988), 84-107.

13. Panagiotis Gennadios (Παναγιώτης Γεννάδιος), *Περί καπνού* (Athens: Τυπογραφείο του Μέλλοντος, 1886), 35-48.

to the countries where the cigarettes were to be consumed, or pivoted to trade in tobacco leaf, thereby becoming suppliers of raw material for manufacturers.¹⁴

INTERWAR REGULATORY REGIME: TOBACCO AS THE
CORE ACTIVITY OF FAMILIAL ECONOMIES IN THE NORTH

It is difficult to overstate how radically the political economy and geography of tobacco production changed as a result of the Balkan Wars, World War I and the Greco-Turkish War (1919-1922). After a decade of almost uninterrupted armed conflict, the Kingdom of Greece had seen its population and territory expand dramatically. The regions of Macedonia and western Thrace, once the most important exporters of Ottoman tobacco, became the northern part of the country. They experienced spectacular demographic growth virtually overnight, especially in Macedonia.

The settlement of hundreds of thousands of families in the north was a notable consequence of the population exchange that followed the Greek defeat in Turkey. For Greek political elites, the choice of the regions known as the *New Lands* (*Néai Xώραι*) as the home for the recently arrived population had to do with more than the fact that the departing Muslims had left available space there. The newcomers were much more numerous, and increasing the presence of Greeks in the new border provinces would undermine, it was hoped, future Bulgarian and Turkish claims

14. Juan Carmona Zabala, *State Expansion and Economic Integration: A Transnational History of Oriental Tobacco in Greece and Germany (1880-1941)* (Doctoral Dissertation, La Jolla, University of California, San Diego, 2018), 38-40.

over these territories. For this exercise in demographic engineering to succeed, a far-reaching transformation would be necessary of the economy, institutions and landscape of northern Greece. Tobacco played an important role in such transformation, as it became the main source of income for tens of thousands of newly settled families.

In the 1920s and 1930s, the increased complexity of socio-political interactions around tobacco production and trade allows us to speak of a new regime of value. This does not mean that tobacco was no longer a source of tax revenue from the point of view of the state, or that prices would not be agreed upon between buyer and seller in each transaction. These features of the previous regime lived on in the new one, although the terms of the negotiation would change.

However, once tobacco became the main, sometimes even the only, economic activity available to countless rural households, price fluctuations in international tobacco markets became an issue that state policy had to address, especially after the economic downturn of the world economy in 1929. While trading firms had been the main agents driving the expansion of Oriental tobacco in western countries under the previous liberal regime, in the interwar period the state acquired unprecedented relevance. Limiting cultivation to avoid crises of overproduction, incentivizing quality, strengthening the capacity of farmers to negotiate with buyers, and promoting the product overseas became new areas of tobacco policy. Newly minted scientific institutions, cadres of technocrats, agricultural cooperatives and business associations entered the stage on which the value of tobacco and the terms of its sale were to be determined.

At the most basic level, the core procedure, by which the tobacco merchant would visit the farmer's home to

negotiate the sale, did not change in the interwar period. Merchants would still use tactics such as giving false market signals, claiming that prices elsewhere were low. They would also approach farmers in financial distress for the purpose of closing the first deal of the season in a village; their goal was to set a low starting price for negotiations with other farmers.¹⁵ What significantly changed in this procedure was not so much its substance, but the social relations that made it a relatively predictable affair.

Under the liberal regime of the long 19th century, a combination of monetary advances and local social bonds had functioned as enforcement mechanisms in the absence of written contracts. The merchant would give an advance at the time of the harvest, and pick up the tobacco at a later point in time, once the farmer had dried the leaves in the sun, and packaged them for transportation and storage. Advances also factored in the process of price formation. The unwritten rule was that the merchant who had given the advance had the right to make the first offer on the tobacco, and that the farmer would give him a discount. Whenever a farmer tried to cheat a merchant who had previously given him an advance, his neighbors would take the merchant's side to protect the reputation of their village.¹⁶ However, the social bonds that had held the previous regime together at the local level became weaker as a result

15. Tobacco merchant Wilhelm Riekes describes a number of tricks of this kind in "Minutes of Zitag governing board meeting, 1917," *R/8855 Zigaretteneinkaufs GmbH., folder 9-1/2, item H-46*, German Federal Archive Berlin-Lichterfelde. For a description of tobacco transactions, see Phaidon Altsitzoglou (Φαίδων Αλτσιτζογλου), *Οι γιακάδες και ο κάμπος της Ξάνθης* (Athens: Αγροτική Τράπεζα της Ελλάδος, 1941), 345-350.

16. Aladar Ottai, *Notizen aus der Geschichte der orientalischen Tabak-kultur und des Tabakhandels* (Sofia: Hofdruckerei, 1933), 11.

of the growth of the tobacco market, as well as the aforementioned disruptions caused by the successive wars and the population exchange.¹⁷

In the more impersonal context of the interwar years, a newly minted state institution known as the Offices for the Protection of Greek Tobacco embodied the attempt to ensure some degree of certainty in the exchanges between farmers and merchants.¹⁸ The enforceability of contracts became particularly important for the state once the Agricultural Bank of Greece (ABG) became a quasi-monopolistic, state-controlled mechanism for financing tobacco production. At stake was the repayment of the farmer's debt to the bank.

Enforceability was also related, in the eyes of policymakers, to the crisis of tobacco exports. The crisis was exacerbated by the fact that Greek tobacco was more expensive than its Bulgarian and Turkish competitors, in part because of higher production costs. An effective enforcement mechanism could prevent farmers from unilaterally canceling contracts and selling to someone else at a higher price at times of high demand. Such behavior would result in upward spirals in tobacco prices that would undermine the competitiveness of Greece's most important export commodity.¹⁹

17. Kaleb Herman Adney's chapter in this volume provides a broader account of how credit featured in the Ottoman tobacco market. His perspective follows the supply of credit upstream, to the level of institutional lenders and transnational financial networks, and distinguishes between export- and domestically-oriented tobacco trade.

18. Nikolaos Sklias (Νικόλαος Σκλιάς), "Επί του καπνεμπορικού," in *Καπνική Σύσκεψις Καβάλλας* (Kavala: Γραφείο Προστασίας Καπνού Καβάλλας, 1937), 151-156.

19. "Ρύθμις και κατοχύρωσις των αγοραπωλησιών καπνού," *Δελτίον καπνού: μηνιαία έκδοσις του Γραφείου Ελληνικού Καπνού Θεσσαλονίκης* 2, no. 10 (October 1928): 1-3.

One of the first measures that the Offices promoted was the use of written contracts. The Offices' proposition in this regard informed Law 4672/1930.²⁰ The law required that both parties fill out a standardized contract form. In addition to the amount of tobacco and its price, the contract specified the tobacco variety, the packaging method, the advance that the farmer received, and the deadline by which the buyer would pick up the tobacco and make the final payment. The law also established a simplified arbitrating mechanism for disagreements between buyers and sellers to reduce the financial and time costs involved in taking such cases to court.²¹

The introduction of law 4672 did not put an end to opportunistic behavior, which was more often than not at the expense of the farmer. The Offices for the Protection of Greek Tobacco and the ABG would repeatedly remind farmers to fill out two copies of the form, and to keep one for themselves, but merchants would often keep both copies, which in practice meant that they could cancel the contract at will.²² They could also make the farmer, who was usually illiterate, vulnerable to abuse by convincing him to sign a blank form.²³ One of the measures that the ABG promoted to prevent such irregularities at the expense of farmers was having the presidents of communal councils (*koinotites*), priests or school teachers present when con-

20. Sklias, "Επί του καπνεμπορικού," 151-156.

21. Law 4672/1930, *Εφημερίς της Κυβερνήσεως*, 9 May 1930. "Τα πεπραγμένα του Γραφείου Προστασίας Ελληνικού Καπνού Καβάλλας κατά το έτος 1938-1939," *Δελτίον καπνού* 2, no. 3 (June 1939): 17-23.

22. *Circular letter 18 December 1934*, Σειρά Εγκύκλιοι και Διαταγαι, Αρχείο ΑΤΕ, Historical Archive of the Piraeus Group Cultural Foundation.

23. *Ibid.* Also Sklias, "Επί του καπνεμπορικού," 151-156.

tracts were signed.²⁴ The practice of signing blank forms was so widespread that several agrarian organizations called for heavier penalties for merchants who engaged in such behavior.²⁵ Other voices sympathetic to farmers called for the prohibition of filling out the deadlines for picking up the tobacco as “undetermined,” and for establishing a maximum deadline of three months. Such a limitation would prevent a merchant from letting the farmer wait in despair for him to appear and execute the deal, until the farmer became so hard pressed for cash that he would accept a price lower than initially agreed.²⁶ Yet, none of these propositions were included in subsequent legislation.

The regulations of the interwar period failed to turn the Greek countryside into perfectly functioning markets. Farmers remained exposed to different forms of behavior on the part of the merchants that was considered illegitimate. Still, law 4672 did grant some protection, at least to the extent that it was enforced. The Offices functioned as arbiters between buyers and sellers throughout the 1930s.²⁷ The ABG also performed an important role as a source of information for farmers about their rights. A number of instances in which the bank’s intervention went too far in supporting the bargaining position of farmers are quite telling in that they show us the limits of what was admissible under the interwar value regime.

24. *Circular letter 18 December 1934.*

25. Ψήφισμα Ζ΄ Πανελλήνιου Καπνοπαραγωγικού Συνεδρίου, 1934, Α1Σ28Υ1 Καπνός, φάκελος 13, έγγραφο 2/21, Historical Archive of the National Bank of Greece.

26. “Διάφορα ζητήματα,” *Δελτίον του Συνδέσμου Γραφείων Προστασίας Ελληνικού Καπνού* 3, no. 11 (July 1935): 21-22. “Ποιοτικός διαχωρισμός των καπνών κατά την συσκευασίαν και χρόνος ενάρξεως των αγορών,” in *Καπνική Σύσκεψις Καβάλλας*, 170-174.

27. Sklias, “Επί του καπνεμπορικού,” 151-156.

In 1932, the Tobacco Merchant Federation of Greece complained to the ABG over the undue behavior of some of its employees. Whenever the price agreed upon by the farmer and the merchant appeared to be low relative to the state of the market, some employees were refusing to execute the transactions. Here, we should keep in mind that an ABG employee had to approve the transfer of ownership over the tobacco whenever the farmer had previously pledged it as collateral for a loan. Soon after the Federation's complaint, the bank's headquarters instructed its branches to not repeat such behavior. As long as the price was enough to pay off the farmer's debt to the bank, there should be no objection. The only exception would be cases where something indicated that the farmer and the seller had agreed to misrepresent the price with the intention to commit tax evasion.²⁸ By now, tobacco was being taxed based on its price.

The Tobacco Merchant Federation was able to increase its own relevance within the interwar value regime. Until 1939, ABG employees were initially not allowed to approve transactions where the farmer's debt would not be fully covered. The Federation won an important concession when this rule became more flexible. If the price agreed upon was not sufficient to pay off the outstanding debt, the Federation could state that the price was reasonable, based on the market conditions at that specific time. If presented with such a statement, the ABG employee would have to proceed with the transaction.²⁹

28. *Circular letter 8 May 1932*, Σειρά Εγκύκλιοι και Διαταγαί, Αρχείο ΑΤΕ, Historical Archive of the Piraeus Group Cultural Foundation.

29. *Circular letters 25 February 1932 and 31 January 1939*, Σειρά Εγκύκλιοι και Διαταγαί, Αρχείο ΑΤΕ, Historical Archive of the Piraeus Group Cultural Foundation.

In the value regime that developed around tobacco in interwar Greece, the state's commitment to letting buyers and sellers freely determine prices remained strong. The Offices for the Protection of Greek Tobacco and the ABG functioned as mechanisms that could go as far as preventing tobacco merchants from using negotiation tactics considered illegitimate, but not further. The regulation of transactions for the purpose of ensuring contract enforceability and the repayment of debt to the ABG remained important features in the value regime that emerged after World War II, while a new balance of political forces and economic imperatives would add new layers of complexity.

POSTWAR RECONSTRUCTION REGIME: TOBACCO AS A
QUICK SOURCE OF OF HARD CURRENCY 1945-1957

The occupation of Greece during World War II, followed by the Civil War that lasted until 1949, destroyed much of Greece's productive capabilities. The country's overall output went back to prewar levels relatively quickly,³⁰ but the future viability of the Greek economy would remain uncertain for several years after the end of the armed conflict. Tobacco exports, which had amounted to more than half of the overall value of outbound trade before the war, remained in a deep crisis into the early 1950s. Many tobacco farmers had turned to the cultivation of subsistence foodstuffs during the war: They often lacked the basic material means to resume tobacco production while sustaining their

30. Panos Kazakos (Πάνος Καζάκος), *Ανάμεσα σε κράτος και αγορά: οικονομία και οικονομική πολιτική στη μεταπολεμική Ελλάδα, 1944-2000*, 7th ed. (Athens: Πατάκης, 2007), 124-125.

own lives; housing, clothing, tools, work animals. A significant number of them had fled their villages in response to the violence of the Civil War.³¹

At the level of inter-state trade politics, it took several years for Greece to come to a durable agreement with its patron power (the United States) and the main buyer of its tobacco (West Germany) that would guarantee a relatively stable international demand.³² While Greek officials wanted tobacco exports to go back to prewar levels with the help of export quotas, subsidies and preferential access to markets, the American envoys with whom they had to agree on their country's economic policy differed. The Americans favored a free trade approach, even if that involved a reorientation of Greece's agricultural and export sectors in the long run. They all agreed that, in the short run, Greece had to urgently jump-start tobacco production, as that was the fastest way to funnel foreign currency into the country.³³

The main difficulty in getting the tobacco sector back up on its feet lay in the low prices that farmers were being offered relative to production costs and the cost of living. The price-scissor problem was particularly pronounced in northern Greece, where tobacco represented a large share

31. Vasileios Ilantzis (Βασίλειος Ιλαντζής), *Σ.Ε.Κ.Ε. και καπνός. Χρονικόν συνεταιριστικής δημιουργίας* (Athens: Τσαϊλάνης, 1973), 16-18.

32. Mogens Pelt, *Tying Greece to the West: US-West German-Greek Relations 1949-1974* (Copenhagen: Museum Tusculanum Press, 2006). Dimitris Apostolopoulos (Δημήτρης Αποστολόπουλος), "Η Ελληνογερμανική Συμφωνία του 1950 για τα καπνά (Tabakabkommen)," in *Ο καπνός στην ιστορία: οικονομικές, κοινωνικές και πολιτισμικές προσεγγίσεις*, ed. Angelos Palikidis (Άγγελος Παληκίδης) (Kavala: Ινστιτούτο Κοινωνικών Κινημάτων & Ιστορίας Καπνού, 2020), 145-55.

33. "Νέα μέτρα προς ενίσχυση των εξαγωγών," *Καπνική Επιθεώρησης* 4, no. 43 (July 1950): 733-750.

in many local economies.³⁴ A number of complex problems lay at the core of the price issue. These included monetary instability, credit bottlenecks, the disintegration of transnational commercial networks, and increased competition with neighboring Turkey. There were no simple solutions to any of these problems in the long run, and none whatsoever in the short run. The most immediate answer to the question of how to get farmers to produce more tobacco was by helping them secure better prices from buyers. This was achieved through an unprecedented combination of subsidies and state-ordered purchases of tobacco.

For the three tobacco crops between 1947 and 1949, state authorities introduced a system where a benchmark price was calculated for each village, based on the state of international markets shortly before farmers would put their tobacco up for sale. That benchmark price was called the *commercial price*. A second price, called the *safety price*, resulted from multiplying average prices paid in a given village in 1938, by a factor of 155, 200 and 260 for the crops of 1947, 1948 and 1949 respectively.³⁵ The multiplier represented the increase in the cost of living compared to the time before the war. Farmers would receive the difference between the commercial and the safety price in the form of a subsidy funded by a tax on cigarettes.³⁶

The body that advised the state on determining the commercial and safety prices was composed of represen-

34. “Η εξέλιξις των τιμών,” *Καπνική επιθεώρησις* 5, no. 54 (April 1951): 948.

35. “Αι τιμαί ασφαλείας,” *Καπνική επιθεώρησις* 4, no. 40 (February 1950): 621. Nikolaos Xanthakis (Νικόλαος Ξανθάκης), “Η προστασία των γεωργικών προϊόντων και η επίδρασις επί των εξαγωγών,” *Καπνική επιθεώρησις* 15, no. 174 (May 1961): 3658.

36. Xanthakis, “Η προστασία των γεωργικών προϊόντων,” 3658.

tatives of farmers' cooperatives and the Tobacco Merchant Federation, as well as staff from a number of ministries.³⁷ For the system to work as intended, however, the prices that merchants offered to farmers would have to actually resemble the state-defined commercial prices – which, after all, were only commercial in theory. In order to incentivize merchants to pay more without resorting to straightforward price controls, the state increased demand by stepping in as a buyer, i.e., by placing large orders with tobacco trading firms. Sometimes, the state's purchases would coincide in time with the private operations carried out by tobacco trading firms. In other cases, the state would buy the tobacco that had remained unsold in the hands of the farmers at the end of the season.³⁸

One important feature of the postwar reconstruction regime was the *ad hoc* character of the state's interventions. Every year it was unknown *a priori* to both farmers and trading firms whether the state would step in to increase the demand for tobacco and, if so, when and on what terms. There was the implicit expectation that, once the disruptions caused by the war subsided, markets would be able to sustain tobacco production again. That had been the case in 1931, when the state had bought up unsold tobacco directly from farmers as a one-off measure in response to the

37. Achilleas Mantzaris (Αχιλλέας Μάντζαρης), “Ανάγκη καπνικού προγράμματος και συντονισμένης καπνικής πολιτικής,” *Καπνική επιθεώρησης* 4, no. 42-43 (April-May 1950): 663-664.

38. Xanthakis, “Η προστασία των γεωργικών προϊόντων,” 3658. “Η συγκέντρωση των καπνών,” *Καπνική επιθεώρησης* 4, no. 48 (October 1950): 821. “Εσωτερικά καπνικά ειδήσεις,” *Καπνική επιθεώρησης* 5, no. 58 (August 1951): 1051. “The Collection of the 1950 Tobacco Crop,” *Καπνική επιθεώρησης* 6, no. 66 (April 1952): 1241. “Η συγκέντρωση των καπνών ανετέθη εις το καπνεμπόριον και την ΣΕΚΕ,” *Καπνική επιθεώρησης* 9 no. 113 (March 1956): 2269.

export crisis of the Great Depression.³⁹ Yet, the years kept passing by and the tobacco sector did not show any signs of stabilization. The 1950 crop was far too large relative to the possibility of its absorption in international markets, which caused unsold stocks to increase. The devaluation of the drachma in 1953 facilitated the export of the tobacco that trading firms had accumulated in previous years.⁴⁰ The combined effects of monetary devaluation and the small size of the 1954 crop enabled a sharp reduction of tobacco stocks, while international demand for Greek tobacco could not be sufficiently met.⁴¹

In the absence of a long-term policy backed up by wide political consensus, the terms of each new round of interventions required the representatives of the different stakeholders to negotiate every year. In fact, even the terms of the negotiation itself were a bone of contention. The debates that the specialized press of the time reported on often revolved around the issue of representation in the processes of decision-making and policy implementation. All sides would often accuse the others of self-seeking opportunism and/or incompetence that hurt the tobacco sector as a whole.⁴²

39. Carmona Zabala, "State Expansion and Economic Integration," 209-218.

40. Xanthakis, "Η προστασία των γεωργικών προϊόντων," 3658.

41. "Δια την υποδοχήν της νέας εσοδείας," *Καπνική επιθεώρησης* 9 no. 104 (June 1955): 2067.

42. Mantzaris (Αχιλλέας Μάντζαρης), "Ανάγκη καπνικού προγράμματος," 663-664. "Η συγκέντρωσις υπό του κράτους των καπνών εσοδείας 1949," *Καπνική επιθεώρησης* 4, no. 44 (June 1950): 693-697. "Αι εργασίαι και τα πορίσματα της καπνεργατικής συνδιασκέψεως," *Καπνική επιθεώρησης* 4, no. 44 (June 1950): 708. "Δια την άμεσον ρευστοποίησιν των καπνών στης συγκεντρώσεως," *Καπνική επιθεώρησης* 5, no. 60 (October 1951): 1093-1094. Tobacco Merchant Federation of Greece (Καπνεμπορική Συνομοσπονδία της Ελλάδος), "Εκθεσις πεπραγμένων," *Καπνική επιθεώρησης*

Farmers' organizations called for the state to create a permanent mechanism to protect their income through high prices, and funnel Greek tobacco into international markets in collaboration with producer cooperatives rather than traditional trading firms.⁴³ In contrast, the Tobacco Merchant Federation complained that income supports were disincentivizing the quality of Greek tobacco, while the stocks of unsold tobacco that were being created by the policy of high prices and state purchases posed a threat to the future operations of trading firms.⁴⁴

How much protection of the farmers' income should take the form of a direct subsidy, and how much as a price inflated through state intervention, was also an important question.⁴⁵ Considerations of long-term consequences aside, in the short term this was a question of how much of the burden should fall on the tax payers who would fund the subsidy, and how much on tobacco exporters in the form of higher prices.

The postwar reconstruction regime succeeded in quickly getting farmers to resume production without starving to death, and bringing exports above prewar levels. In retrospect, it seems hardly surprising that it failed to make the

7, no. 75 (January 1953): 1425. "Τι ζητούν οι καπνοπαραγωγοί," *Καπνική επιθεώρησης* 9, no. 114 (April 1956): 2307.

43. "Κοινές αποδείξεις καπνοπαραγωγικών και καπνεργατικών οργανώσεων," *Καπνική επιθεώρησης* 4, no. 44 (June 1950): 713-714. "Το πανελλήνιον καπνοπαραγωγικών συνέδριον Θεσσαλονίκης," *Καπνική επιθεώρησης* 5, no. 53 (March 1951): 926.

44. Mantzaris, "Ανάγκη καπνικού προγράμματος," 663-664. Καπνεμπορική Συνομοσπονδία της Ελλάδος, "Εκθεσις πεπραγμένων," 1424.

45. "Η συγκέντρωσις των αδιάθετων καπνών," *Καπνική επιθεώρησης* 4, no. 44 (June 1950): 692. Emmanouil Tsouderos (Εμμανουήλ Τσουδερός), "Η συγκέντρωσις των αδιάθετων καπνών," *Καπνική επιθεώρησης* 4, no. 46 (June 1950): 798.

tobacco sector viable in the long run without state-managed redistribution, at least judging from the dominant international trends of the time. Intervention was the rule rather than the exception in western countries. Eventually, a new consensus grew around the issue of the state's direct participation in the market.

By 1957, even those who represented the interests of trading firms in the public sphere had changed their stance on the existence of large stocks of unsold tobacco. When large stocks formed in 1950, there were multiple complaints about how they immobilized commercial capital, increased storage costs, and made firms hesitant to purchase tobacco from subsequent crops.⁴⁶ After the devaluation of 1953 and the small crop of 1954 shrank stocks to the point that international demand was left unmet, the rhetoric shifted. The creation of "regulatory stocks" appeared in public debates as a necessary step towards the long-term stabilization of the tobacco sector.⁴⁷ The limitations of the postwar regime were about to usher in a new one.

MARKET-BALANCING REGIME: TOBACCO AS A COMMODITY
IN NEED OF PERMANENT SUPPORT (1957-1981)

The establishment of the National Tobacco Board in 1957 was a turning point, not only in the sense that it was an important step in the creation of a new value regime for Greek

46. "Άυριον θα είναι αργά," *Καπνική επιθεώρησης* 4, no. 44 (June 1950): 691. "Και πάλιν τα καπνά εσοδείας 1947," *Καπνική επιθεώρησης* 4, no. 49-50 (November/December 1950): 844.

47. "Έν αναμονή των κυβερνητικών αποφάσεων," *Καπνική επιθεώρησης* 9, no. 112 (February 1956): 2243. "Γα 10 χρόνια της Σ.Ε.Κ.Ε.," *Καπνική επιθεώρησης* 12, no. 133 (November 1957): 2692-2693.

tobacco. It also represented a turn away from the commitment to economic liberalism that had, by and large, characterized Greece's ruling elites since the nineteenth century. No longer would state intervention in markets be presented as *ad hoc* responses to specific, critical conjunctures, as had been the case during the crisis of the 1930s or the postwar years. A central component of the NTB's mandate was to "intervene in the tobacco market with the purpose of creating balance between supply and demand."⁴⁸ Implicit in this was the assumption that a balance between supply and demand, rather than naturally existing in the absence of some external disruption, needs to be intentionally created. The inability of the previous regime to guarantee the sustainability of the tobacco sector created room for a new consensus to emerge around the need for a systematic, predictable policy on tobacco. Such a consensus would soon have unintended consequences.

The NTB was to create balance between supply and demand by buying large amounts of tobacco on a regular basis. Already before its establishment, there were intense debates around the representation of stakeholders in the decision-making mechanisms regarding what to buy, where, and at which prices. Farmers' associations, in particular, were dissatisfied with their share, and complained about the excessive power of trading firms and the political class.⁴⁹

48. Xanthakis, "Η προστασία των γεωργικών προϊόντων," 3658-3659. Also see intervention of MP D. Thanopoulos in "Η εισηγητική έκθεση του Υπουργού του Εμπορίου και αι συζητήσεις της Επιτροπής Εξουσιοδοτήσεως," *Η Φωνή των Συνεταρισμών* 12 no. 143-144-145-146 (June-September 1957): 3482-3487.

49. "Το πλήρες κείμενον του νόμου περί Εθνικού Οργανισμού Καπνού," *Καπνική Επιθεώρησης* 11, no. 129 (July 1957): 2615-2618.

Instead of the new agency hiring its own staff for the purpose of executing its purchasing programs, they proposed that producers' cooperatives play that role.⁵⁰ The spokesmen for the trading firms' interests voiced the concern that political maneuvering might lead the NTB to pay excessively high farm prices, to the point of making the tobacco impossible to export later on.⁵¹ On the other hand, they were optimistic about other parts of the agency's mandate, specifically the funneling of state resources towards farm upgrades that would help farmers lower production costs.⁵²

Against this mixed background of reservations and hopes, the NTB started sending men to the tobacco villages for the grading of the 1958 crop. The initial purpose was to calculate the prices that it would later offer for the tobacco that remained unsold at the end of the season. A new opportunity had just opened up for farmers' associations to shape the new value regime according to their interests.

The low prices that Greek farmers secured in the market were related to the shift of much of the international cigarette industry towards tobacco varieties of lower quality. From the point of view of trading firms, this circumstance justified paying farmers only slightly more for high quality leaves than for those of lesser quality. The position of farmers' associations, in contrast, was that claims about

50. "Παρατηρήσεις επί του νομοσχεδίου περί Εθνικού Οργανισμού Καπνού," *Η Φωνή των Συνεταιρισμών* 12 no. 140 (March 1957): 3436-3437.

51. "Η κρατική παρέμβασις εις τας αγοράς καπνού," *Καπνική Επιθεώρησις* 11, no. 126 (April 1957): 2546-2547. "Αι κρατικάί παρεμβάσεις απειλούν το μέλλον της ελληνικής καπνοπαραγωγής," *Καπνική Επιθεώρησις* 11, no. 127 (May 1957): 2561.

52. "Το νομοσχέδιον περί Εθνικού Οργανισμού Καπνού," *Καπνική Επιθεώρησις* 11, no. 128 (June 1957): 2584.

the shift towards lower qualities on international markets were exaggerated to justify the exploitation of farmers through low prices. Furthermore, long-term growth in overall tobacco consumption worldwide and the possibility of further shifts in consumer preferences kept hopes alive for quality to again become a highly valued feature in the near future.⁵³ Such hopes, in addition to the lack of alternative employment opportunities in the regions specialized in high-quality varieties, made it necessary for the state to incentivize the continuation of their production.

Under the postwar reconstruction regime, trading firms had often complained that measures aimed at increasing farmers' incomes exacerbated the problems of the sector. Subsidies and state purchasing programs, they claimed, removed whatever capacity was left in market prices to incentivize quality. When the NTB deployed its staff to evaluate the tobacco that was for sale in 1958, it did so in order to be able to offer diversified prices based on quality when the time came to buy whatever had been left unsold at the end of the season.

Soon thereafter, thousands of farmers met at a rally in Salonika to demand that the NTB's grades be used to determine price floors for trading firms carrying out private purchases.⁵⁴ After all, the fact that the NTB was willing to adjust prices to quality could be interpreted as an admission that there was such a thing as objective quality that could be linked to a fair price. To put it simply, the state's response to a demand made initially by the trading firms

53. "Τα νέα καθήκοντα," *Καπνική Επιθεώρησης* 9, no. 99 (January 1955): 1935.

54. "Το συλλαλητήριο των καπνοπαραγωγών απεδοκίμασε τα κυβερνητικά μέτρα," *Μακεδονία* 1 April 1958, 7.

(i.e., that state intervention did not disincentivize quality) created the conditions for farmers to make a new demand, that quality should determine prices on the private market on a compulsory basis.

For a number of years, the demand that the NTB's grading mechanism become the basis for a policy of price controls in the private market was one of the main demands of farmers' organizations.⁵⁵ In 1968, the Regime of the Colonels (1967-1974) fulfilled it.⁵⁶ After the end of the dictatorial regime and up until Greece's integration into the European Common Agricultural Policy, the system of controlled prices based on NTB grades remained in place, with minor modifications only.

Whether the decision to link NTB grades to price controls actually increased real incomes, or was little more than a symbolic move to highlight the purported pro-farmer orientation of the Colonels' Regime is a question beyond the scope of this study.⁵⁷ The adoption of this policy does exemplify, however, that farmers' associations enjoyed

55. "Τιμήν 5 δραχμών κατά κιλόν προσφέρει το καπνεμπόριον δια τα καπνά Σερρών," *Μακεδονία* 4 October 1959, 3.

56. "Η βαθμολόγησις των καπνών εις Καβάλαν," *Μακεδονία* 5 December 1968, 4. "Ἐρχισεν εις την Θεσσαλονίκην ευρεία σύσκεψις δια την ὀργάνωσιν των αγοραπωλησιῶν καπνῶν," *Μακεδονία* 7 June 1969, 3. "Συνεχίζονται εις την βόρειον Ἑλλάδα αι αγοραπωλησίαι των καπνῶν ποικιλιῶν «καμπά κουλάικ» και «Σαμψούς»," *Μακεδονία* 24 March 1971, 9. "Ἡ πορεία της βαθμολογίας," *Καπνική Επιθεώρησις* 23, no. 266 (January 1969): 5721.

57. Patronis and Liangovas argue that the pro-farmer rhetoric of the regime ultimately served the purpose of keeping agricultural prices low for the sake of industrial development. Vasilis Patronis and Panagiotis Liangovas (Βασίλης Πατρώνης and Παναγιώτης Λιάγκοβας), "Κοινωνική ενσωμάτωση και οικονομική πολιτική στα χρόνια της δικτατορίας στην Ελλάδα, 1967-1974: ο ειδικός ρόλος του αγροτικού τομέα," *Ελληνική Επιθεώρηση Πολιτικής Επιστήμης* 23 (2004): 107-137.

some measure of success in giving shape to the framework within which agricultural products were exchanged. The contingent, constantly negotiated character of the value regime that formed around Greek tobacco in this period becomes particularly apparent when one looks at its actual implementation on the ground.

Under the new system, every year NTB officials would grade the tobacco of each farmer individually, and divide his crop into a first and a second category with a minimum price for each. A third category, known as “useless” could not be sold and had to be destroyed, based on a detailed procedure. Merchants would then be able to make offers for the farmer’s tobacco, but never below the established minimum. Regulations also limited how close the price offered for the first category could be to that of the second category, in order to ensure that better tobaccos would receive a sufficiently higher price compared to lower qualities. Whatever amounts of the crop remained unsold at the end of the season, the NTB would buy at a discount on the minimum price.⁵⁸

Within this regime, conflict between farmers, merchants and state officials could sometimes be quite straightforward. Farmers could stage protests or lobby politicians to ask for better grades, while the advocates of the trading firms’ interests complained that the state used artificially high grades as a form of social policy.⁵⁹ There were times,

58. “Η παρέμβασις του Ε.Ο.Κ. και η εγγύησις,” *Καπνική Επιθεώρησις* 26, no. 303 (February 1972): 35. “Οι όροι των αγορών της εσοδείας 1973,” *Καπνική Επιθεώρησις* 28, no. 327 (February 1974): 37.

59. “Οι τιμές ασφαλείας και η επιδότηση,” *Καπνική Επιθεώρησις* 29, no. 338 (January 1975): 3-4. “Λάθη και κάτι περισσότερο,” *Καπνική Επιθεώρησις* 29, no. 351 (February 1976): 32. “Αλλάζει το σύστημα βαθμολογήσεως των καπνών,” *Μακεδονία* 21 February 1976, 7. “Επανεκτίμηση καπνών

however, when conflict would revolve around issues that, while possibly looking quite trivial to an external observer, remind us that the Devil is in the details.

Farmers' representatives complained, for instance, when in 1976 NTB officials started writing the grade and minimum price on a sticker placed on each tobacco bale. The problem, they explained, was that it would be more difficult for the farmer to negotiate a higher price from the potential buyer. They also complained that NTB technicians would not give the grades in writing immediately after examining the bales.

This might remind some readers of their own experience with impatient students after an exam, although in this case there was an important practical implication: Receiving the written grade immediately would enable the farmer to quickly exercise his right to request a repetition of the grading, without running the risk of missing potential buyers in the meantime.⁶⁰ In another instance, farmers dissatisfied with the prices and subsidies announced for the year organized collective refusals to accept the documents that stated their grades, in an attempt to disrupt the normal functioning of the market through what one could call a form of bureaucratic sabotage.⁶¹

κατόπιν παραπόνων παραγωγών δυο νομών," *Μακεδονία* 13 March 1976, 7. "Η ελληνική καπναγορά," *Καπνική Επιθεώρησης* 32, no. 375 (February 1978): 44.

60. "Διαμαρτύρονται οι παραγωγοί της Προσοτσάνης για τον τρόπο της βαθμολογήσεως των καπνών τους," *Μακεδονία* 9 December 1976, 9.

61. "Απραξία στις χωρικές αγορές," *Καπνική Επιθεώρησης* 29, no. 351 (February 1976): 33.

THEORETICAL AND HISTORIOGRAPHIC IMPLICATIONS

The idea that regimes of value, understood as the set of rules regulating the exchange of commodities and the determination of their value, are subject to challenge and change over time is not new. Nor is the proposition that there is a close connection between society-wide historical change and the redefinition of value regimes.⁶² With the examination of four tobacco value regimes spanning a period of over a hundred years, I hope to have demonstrated that their relative stability over limited periods of time allows us to propose some form of periodization.

Periodization is possible, I argue, despite the fact that these regimes are almost constantly challenged. Farmers and consumers could, and sometimes did, avoid taxation through illegal tobacco production and trade.⁶³ Merchants often disregarded interwar regulations requiring written contracts, and farmers in the 1970s could reject the grades that NTB officials assigned to their tobacco. Yet, some basic aspects of value regimes, such as which actors have a say in determining a price and with which stated purpose, remained constant for a number of years.

Furthermore, it might be worthwhile to further examine whether violations of the stated rules constitute challenges that indicate the regime's fragility, or whether in

62. William M. Reddy, "The Structure of a Cultural Crisis: Thinking about Cloth in France before and after the Revolution," in *The Social Life of Things*, ed. Appadurai, 261–284.

63. Evidence of one among many examples of such violations is the 1902 conviction of Nikolaos Giovannis for possessing cut tobacco that had not gone through a state-owned processing facility. Document 1203, Αποφάσεις Πλημμελειοδικείου (1882-1920), Αρχαία Δικαστηρίων Καρδίτσας, General State Archives Karditsa.

fact they function as necessary escape clauses that help keep it together.

The story of how the value regimes of Greek tobacco succeeded each other invites us to think of how regime changes take place. The shift from the liberal regime of the nineteenth century to the regulatory regime of the interwar period was, to a large extent, the result of demographic and border realignments that caused the place of tobacco in the national economy to change. It would no longer represent additional income for some farmers, but the only source of livelihood for tens of thousands of families in the newly annexed regions of the north.

We could think of demography and inter-state conflict as factors that were external to the liberal value regime itself. The same could be said about the catastrophes of World War II and the Civil War, which created the conditions for the emergence of the postwar regulatory regime. There are other factors that, while being internal to the regime, facilitate its succession by a new one. Such would be the case of the postwar reconstruction regime's inability to create a relatively stable, self-sustaining tobacco market that would just require occasional, *ad hoc* fixes.

One caveat for making a distinction between external and internal factors conducive to regime change is that participants in a regime live simultaneously inside and outside of it. The income that a farmer makes inside the tobacco value regime only becomes a reason to protest when it proves insufficient to pay for necessities outside of the regime. Likewise, state officials can only allocate money for tobacco subsidies if they do not spend it for other purposes that might be unrelated to this particular commodity.

Still, the distinction is useful in that it allows us to assess the functioning of economic sectors in their own

terms, while keeping the goals of historical actors in mind. I believe that this approach is, at the very least, as productive as the usual projection of the historian's own measure of success by asking whether the country's GDP, overall output, per-hectare yields or volume of exports increased, or whether a social group remained dependent on subsidies and tax exemptions.⁶⁴

I shall conclude this reflection by issuing a conceptual call to arms for fellow historians of modern Greece. The concept of regimes of value and the exploration of how they change over time have the potential of uncovering new perspectives on modern Greek history. Let us take, for instance, the narratives of the penetration of the Greek countryside by state institutions seeking to link agricultural production to urban financial capital, and to upgrade the country's productive capabilities based on agricultural science in the interwar period.⁶⁵

A focus on the novelties affecting the sale of tobacco reveals that much of the state's intervention also had to

64. This approach dominates Greek economic historiography. See, for instance, Chrysafis Iordanoglou (Χρυσάφης Ιορδάνογλου), *Η ελληνική οικονομία μετά το 1950*, vol. 1 (Athens: Τράπεζα της Ελλάδος, 2020); Kostas Kostis (Κώστας Κωστής), *Ο Πλούτος της Ελλάδας: η ελληνική οικονομία από τους Βαλκανικούς πολέμους μέχρι σήμερα* (Athens: Πατάκης, 2019); Panos Kazakos (Πάνος Καζάκος), *Ανάμεσα σε κράτος και αγορά : οικονομία και οικονομική πολιτική στη μεταπολεμική Ελλάδα, 1944-2000*, version 7, 7th ed. (Athens: Πατάκης, 2007).

65. Catherine Brégianni, "Banking System and Agricultural Co-Operatives in Greece (1914-1936): Institutional Renovation or Economic Decline?," in *Agricultural Co-Operatives in South and Central Europe 19th-20th Century: A Comparative Approach*, ed. Helen Gardikas-Katsiadakis and Catherine Brégianni (Athens: Academy of Athens, 2013), 49–74; Dimitris Panagiotopoulos (Δημήτρης Παναγιωτόπουλος), *Οι αγρότες στην ελληνική ιστορία: από την επανάσταση στην παγκοσμιοποίηση* (Athens: Πατάκης, 2022), 217-237.

do with managing inter-class conflict between farmers and merchants, and enhancing efficiency through lower transaction costs. With regard to the emergence of the postwar economic model, the value regimes perspective invites us to think of it as a contingent, organic, longer-term process, rather than as the establishment of “rules of the game” and intervention mechanisms early in the period.⁶⁶

Understanding the conflict around the terms in which value was assigned to agricultural products is also a necessary step for a convincing account of how agrarians, despite lacking any substantial electoral traction, were able to further their agenda on different fronts in postwar Greece.⁶⁷ Given the long list of commodities that are relevant to Greek society, it goes without saying that a combined study of multiple commodities will be needed before we can formulate comprehensive new accounts. Here, I should warn against the antiquarian-esque accumulation of factual evidence about commodities, unless done for the purpose of informing subsequent historical analysis and interpretation. The task will require a considerable amount of work, although most probably of the intellectually fruitful kind.

66. Kazakos, *Ανάμεσα σε κράτος και αγορά*, 145. Ιορδανογλου, *Η ελληνική οικονομία*, 61-62.

67. Dimitris Panagiotopoulos (Δημήτρης Παναγιωτόπουλος), *Αγροτικό Κόμμα Ελλάδος: Όψεις του αγροτικού κινήματος στην Ελλάδα* (Athens: Πλέθρον, 2010), 105-134.

PART II
COMMODITIES AND EMPIRE

The Order of the Phoenix: Imperial Eco-Politics on the Ottoman and American Date Palm Commodity Frontiers, 1869-1904¹

Atar David

In January of 1924, *Money-Making* magazine tried to lure Americans into California's date palm cultivation business using this provocative (and quite exaggerated) proposition: "Do you want to make a million dollars in five years?" Of the various opportunities published in that issue – opening an electric bakery, managing something called a portable restaurant, or operating hand looms – date palm cultivation promised, according to the writer Jane Elwyn,

1. I wish to thank Juan Carmona-Zabala and Raymond Hyser for their invaluable notes on early drafts of this paper.

a seemingly endless source of revenue. “Here is one thing that is not generally known... if all the land on which dates can be grown in the United States were planted and producing, the production would not be enough for the United States alone, proving that demand exceeds the supply.”² While the magazine undoubtedly inflated the economic potential of date cultivation schemes (ask any date farmer for their financial reports), they recognized the increasing demand for the Middle Eastern sweet treats among American consumers. In retrospect, the early 1920s were probably the ideal time for Americans to go into the date cultivation business. After years of hesitant experiments, the American industry began satisfying a larger part of the local demand, surpassing imports from the Middle East. However, this was not always the case. Considering the state of the American date industry in the late 19th century - merely thirty years prior to *Money Making's* uber-optimistic vision – its hopeful tone sounds more like wishful thinking than concrete opportunity.

By the late 19th century, American scientists in the southwest began experimenting with date palm (*Phoenix dactylifera*) cultivation. At the same time, landowners in the southern parts of Ottoman Iraq began planting these trees in numbers greater than before to supply the increasing demand for dates among western consumers. These two seemingly unrelated agricultural schemes were driven not only by a desire to eat the date's delicious fruits, to enjoy its nutritional values, or to rest in the pleasant shade of its canopy. Instead, American scientists and Ottoman farmers found themselves, at times reluctantly, a part of

2. Elwyn, Jane. “Date growing in sunny California,” *Money Making Magazine*, January 1924.

a drama that stretched beyond their plots. Ottoman and American state officials encouraged date cultivation in their respective frontier areas to supply the growing western demand for dates. The push towards date cultivation was also a part of a broader Imperial effort to reorganize society and nature in the remote frontiers of the Ottoman and the American empires. Date cultivation transformed the fringes of these two empires into very different examples of the same phenomenon. Both became *date palm commodity frontiers*.

Environmental historian Jason Moore first suggested the term *commodity frontier* as a part of his ecological revision of world-system analysis. Moore's inquiry into the global sugar trade led him to define commodity frontiers as a "socio-ecological process" in which "the world economy and local ecosystems interact to determine the rate of capitalist expansion."³ According to Moore, the global spread of capitalism resulted not only from the Industrial Revolution but from the global transition of imperial peripheries into cash crop economies to supply the demand of western consumers. New agricultural schemes led, in their turn, to new forms of subjugating labor and nature. Therefore, Moore concludes that culture and nature, not just industry and science, shaped global capitalist expansion's velocity, volume, and vectors. While Moore was not the first environmental historian to recognize the deep connection between capital and ecology, his ideas fostered new conversations about the relationship between land, labor, and nature and

3. Jason W. Moore, "Sugar and the Expansion of the Early Modern World-Economy: Commodity Frontiers, Ecological Transformation, and Industrialization," *Review (Fernand Braudel Center)*, 2000, 411.

the global transition into cash crop economies.⁴ Since then, historians of various backgrounds have adopted the term to explain (to name a few) changes in colonial ecological policies, globalization dynamics, capitalist expansion patterns, and rural transformations.⁵

Scholars of commodity frontiers often focus on a capitalist expansion that happened in and through European colonialism and its remote frontiers. They tend to overlook land empires like the Ottoman or the American. Further-

4. See, for example, William Cronon, *Changes in the Land: Indians, Colonists, and the Ecology of New England*, 1st rev. ed., 20th-anniversary ed (New York: Hill and Wang, 2003); William Cronon, *Nature's Metropolis: Chicago and the Great West*, 3. print (New York: Norton, 1992); Donald Worster, *Dust Bowl: The Southern Plains in the 1930s*, 25th anniversary ed (New York: Oxford University Press, 2004); Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (New York: Harper & Row, 1980); Carolyn Merchant, *Ecological Revolutions: Nature, Gender, and Science in New England* (Chapel Hill: University of North Carolina Press, 1989).

5. William Beinart and Lotte Hughes, *Environment and Empire*, Oxford History of the British Empire Companion Series (Oxford ; New York: Oxford University Press, 2007); Joe Regan and Cathal Smith, *Agrarian Reform and Resistance in an Age of Globalization: The Euro-American World and Beyond, 1780-1914* (Routledge, 2018); Sabrina Joseph, *Commodity Frontiers and Global Capitalist Expansion: Social, Ecological and Political Implications from the Nineteenth Century to the Present Day* (Springer, 2019); Sven Becket et al., "Commodity Frontiers and the Transformation of the Global Countryside: A Research Agenda," *Journal of Global History* 16, no. 3 (November 2021): 435–50, <https://doi.org/10.1017/S1740022820000455>. See the various reactions to Becket et al.'s article in *Journal of Global History* 16, no. 3 (November 2021). Moore's ideas also contributed to the rise of the new history of capitalism – a field that is mainly concerns with the origins and development of capitalist systems. See: Sven Becket et al., "Interchange: The History of Capitalism," *The Journal of American History* 101, no. 2 (2014): 503–36; Eric Hilt, "Economic History, Historical Analysis, and the 'New History of Capitalism,'" *The Journal of Economic History* 77, no. 2 (June 2017): 511–36, <https://doi.org/10.1017/S002205071700016X>; Seth Rockman, "What Makes the History of Capitalism Newsworthy?," *Journal of the Early Republic* 34, no. 3 (2014): 439–66.

more, while they rightfully point at the transition into cash crop agriculture as a critical feature in this process, the question of motivation remained obscure. Capital accumulation is often used to explain the trajectory of commodity frontiers – they came to be at and expanded into places where such accumulation became possible. Ascribing other motivations to the rise of cash crop schemes remained a matter for historians of commodities who, following Arjun Appadurai, looked beyond economic explanations and studied the “social life” of things.⁶ Commodity history, therefore, helps us think of the commodity frontier as a place (and, as scholars rightly pointed out, a process) that involves the reconfiguration of both nature and power in the hot furnace of culture.⁷ The introduction of cultivation methods, the implementation of new state-led policies, the remaking of existing ecological systems, and the implementation of various political aspirations are all significant parts of making the commodity frontier.

Date palms make an ideal crop for developing a commodity frontier: they can endure extreme heats, are dura-

6. Arjun Appadurai, ed., *The Social Life of Things: Commodities in Cultural Perspective* (Ethnohistory Workshop, Cambridge; New York: Cambridge University Press, 1986).

7. Sidney W. Mintz, *Sweetness and Power: The Place of Sugar in Modern History* (New York: Penguin Books, 1986); Arturo Warman, *Corn & Capitalism: How a Botanical Bastard Grew to Global Dominance* (Chapel Hill: University of North Carolina Press, 2003); John Soluri, *Banana Cultures: Agriculture, Consumption, and Environmental Change in Honduras and the United States*, 1st ed (Austin: University of Texas Press, 2005); Gregory T. Cushman, *Guano and the Opening of the Pacific World: A Global Ecological History*, Studies in Environment and History (Cambridge ; New York: Cambridge University Press, 2013); Sven Becket, *Empire of Cotton: A Global History* (Vintage, 2015); Francesca Bray et al., *Rice: Global Networks and New Histories* (Cambridge: Cambridge University Press, 2015); Jonathan E. Robins, *Oil Palm: A Global History* (UNC Press Books, 2021).

ble to alkali soil, and require nothing more than a constant supply of water. Farmers in southern Iraq have been digging irrigation canals that utilize the flow of the Tigris and Euphrates for thousands of years. In the American southwest, grand irrigation projects were a crucial part of the westward expansion.⁸ Therefore, in both locations, date culture could prosper in places where no other commercial crops could even be grown. Date agriculture, therefore, offered a path to develop commodity frontiers by expanding agricultural projects to new ecologies and utilizing “unproductive” land in arid regions.

The following essay leans on commodity frontier literature and commodity history to trace the origins of two similar-yet-different date palm commodity frontiers of the late 19th century. I first describe how Ottoman officials, technol-

8. For some accounts of southern Iraq’s irrigation infrastructure, see: Margareta Tengberg, “Beginnings and Early History of Date Palm Garden Cultivation in the Middle East,” *Journal of Arid Environments* 86 (2012): 139–47; William Patrick Andrew, *Memoir on the Euphrates Valley Route to India: With Official Correspondence and Maps* (London: W. Lewis and Son, 1857), 103; David Fairchild, “Persian Gulf Dates and Their Introduction into America,” *Seed and Plant Introduction and Distribution* (Washington, D.C.: U.S. Department of Agriculture, Bureau of Plant Industry, December 19, 1903), 15; Paul Popenoe and Charles L. Bennett, *Date Growing in the Old World and the New* (West India Gardens, 1913), 89. For some accounts of American irrigation infrastructure in the west, see: Donald Worster, *Rivers of Empire: Water, Aridity, and the Growth of the American West*, 1. issued as an Oxford Univ. Press paperback (Oxford: Oxford Univ. Press, 1992); Mark Fiege, *Irrigated Eden: The Making of an Agricultural Landscape in the American West*, Weyerhaeuser Environmental Books (Seattle: University of Washington Press, 1999). Two relatively new works on irrigation projects on the U.S.-Mexico border are: Mikael Wolfe, *Watering the Revolution: An Environmental and Technological History of Agrarian Reform in Mexico* (Durham: Duke University Press, 2017); Tore C. Olsson, *Agrarian Crossings: Reformers and the Remaking of the US and Mexican Countryside*, *America in the World*, Vol. 24 (Princeton: Princeton University Press, 2017).

ogy, and nature transformed southern Iraq's date cultivation region into a commodity frontier. Later, I show how similar forces and different human historical protagonists created a date palm commodity frontier in the American southwest. I draw on travelers' accounts, official correspondence, and agricultural manuals to position these commodity frontiers as a part of larger efforts to shape nature and culture in imperial peripheries. The rise of commodity frontiers is always a part of a wider *eco-political* project to transform society and ecology. Therefore, I argue that a deeper analysis of commodity frontiers that considers not only capital but ecology, culture, politics, and the materiality of the commodities themselves results in a more complex understanding of these places. Furthermore, such analysis brings forward the material and intellectual global networks that connected these seemingly unrelated places together. As such, a global examination of related commodity frontiers serves as another step in complexing old spatial conceptions and opens new possibilities for historical analysis.

RESHAPING THE OTTOMAN DATE PALM FRONTIER

By the late 19th century, the Ottomans saw the Arab Gulf as an imperative political frontier of their empire.⁹ Southern

9. Hala Mundhir Fattah, *The Politics of Regional Trade in Iraq, Arabia, and the Gulf, 1745-1900*, SUNY Series in the Social and Economic History of the Middle East (Albany, NY: State University of New York Press, 1997); Frederick F. Anscombe, *The Ottoman Gulf: The Creation of Kuwait, Saudi Arabia, and Qatar* (New York: Columbia University Press, 1997). The British empire, on its part, saw the Gulf as an important region for their ability to maintain control over India. See: James Onley, *The Arabian Frontier of the British Raj: Merchants, Rulers, and the British in the Nineteenth-Century Gulf* (Oxford University Press on Demand, 2007).

Iraq, and especially the province (*wilayat*) of Basra and its central port served as a bridge to eastward trade routes. Like other places around the empire in the post-Tanzimat years, Basra witnessed an increased presence of what historian Eugene Rogan called “agents of change”: Ottoman state officials, merchants, and European missionaries. They all sought to take advantage of the empire-wide reorganization and harness the new land and tax regimes to their benefit.¹⁰ The region’s ecologies were crucial to their efforts: by developing a cash crop economy based on date palms, these agents of change tried to accumulate wealth and, at the same time, maintain their political power. Therefore, Basra and its date palms demonstrate historian Chris Gratian’s argument that politics and ecology were both substantial pillars of 19th-century Ottoman reforms.¹¹ This dual project of reshaping local politics while reorganizing local ecologies coincided with incorporating Basra’s dates into global markets. Ottoman officials, however, were by no means the first to acknowledge the importance of the date palm to local communities.

10. Eugene L. Rogan, *Frontiers of the State in the Late Ottoman Empire: Transjordan, 1850-1921*, Cambridge Middle East Studies 12 (Cambridge; New York: Cambridge University Press, 1999), 19.

11. Chris Gratian, *The Unsettled Plain: An Environmental History of the Late Ottoman Frontier* (Stanford University Press, 2022), 4,14. For more on the environmental history of late-19th century Ottoman frontiers, see: Elizabeth Williams, “Cultivating Empires: Environment, Expertise, and Scientific Agriculture in Late Ottoman and French Mandate Syria” (Ph.D. Dissertation, Washington, D.C., Georgetown University, 2015); Samuel Dolbee, “The Locust and the Starling: People, Insects, and Disease in the Late Ottoman Jazira and After, 1860-1940” (Ph.D. Dissertation, New York, New York University, 2017); Samuel Dolbee, “Empire on the Edge: Desert, Nomads, and the Making of an Ottoman Provincial Border,” *The American Historical Review* 127, no. 1 (2022): 129–58.

People and dates coevolved in the fertile strip where the Tigris and Euphrates meet (*Shatt al-Arab*) and around Basra for thousands of years. The date palm “used” people for reproduction: farmers pollinated its pistillate (female) flowers, carried its pits, and replanted its offshoots. People, for their part, used various parts of the plant for construction, shade, and feeding livestock.¹² In the shady spaces between the date palms, local farmers planted crops like barley and figs that could not otherwise survive the scorching desert sun. Most importantly, locals consumed the tree’s nutritious fruits and traded them with nearby port cities. Iraqi dates, often referred to as Basra Dates (*Basrawi*), were “known for their superior quality, which extends that of Persian or Haliji dates.”¹³ During the first half of the 19th century, some 150 ships left Basra for India and the Arab Gulf carrying about 60 tons of dates each.¹⁴ This delicate equilibrium of land usage, local trade, and polyculture remained in place until the second half of the 19th century.

The new technologies of the 19th century, like the steamship, the train, and the telegraph, enabled and accelerated the region’s transition into a date palm commodity frontier. The most meaningful transformation of all was the inauguration of the Suez Canal in 1869, which turned Basra from a

12. The most remarkable use I found for dates was for irrigation; according to David Fairchild, farmers in Basra made pipes out of hollow date trunks and used those to control the water level in the many canals that watered date groves. See: Fairchild “*Persian Gulf Dates and Their Introduction into America*,” 15.

13. Khawlah ‘Abd Allāh ‘Alīlī, *Tijārat Al-Tumūr Fī Imārāt al-Sāhil al-‘Arabī Lil-Khalīj al-‘Arabī, 1914-1939 (Date Trade in the Arab Gulf, 1914-1939)*, al-Ṭab‘ah al-ūlā (Abū Ḍaby: Dā‘irat al-Thaqāfah wa-al-Siyāhah, 2018), 194.

14. Ḥusayn Muḥammad Qahwātī, *Dawr Al-Başrah al-Tijārī Fī al-Khalīj al-‘Arabī, 1869-1914* (Baghdad: Matba‘a al-‘irshad, 1980), 356.

regional junction to a central global trade center. The canal compressed the journey from London (and from there to the U.S.) to eastern markets and introduced western consumers to new commodities. During the date harvest season, which usually lasted from August to October, Basra's port became a buzzing center for Ottoman, British, and American ships.¹⁵ Although dates were known to British and American palates, their availability created new demand. Date imports to the U.S. grew steadily throughout the second half of the 19th century: about 1.5M lbs. of dates were imported to the U.S. in 1860, valued at some \$29,000. By 1891, more than 20M lbs. of dates, valued at some \$670,000, were imported.¹⁶ These external economic changes overlapped with internal Ottoman reorganization efforts.

Many Ottoman and non-Ottoman travelers who visited Basra during the 19th century overlooked, ignored, or simply missed the economic potential latent in the region's ecologies. For centuries, Ottoman officials viewed Arab lands as "a distant, foreign land inhabited by unruly Bedouins."¹⁷ One such official was 'Ali Beck of the Ottoman

15. Matthew S. Hopper, "The Globalization of Dried Fruit: Transformations in the Eastern Arabian Economy, 1860s–1920s," in *Global Muslims in the Age of Steam and Print*, ed. Nile Green and James Gelvin (University of California Press, 2013), 158–82; Muḥammad Ḥarb and Tasnīm Muḥammad Ḥarb, *Rihlāt 'uṭmāniyya fī al-Ġazīra al-'arabiyya wa al-Hind wa Āsyā al-wusṭā: mā bayn al-qarnayn al-sādis 'aṣar wa al-īshrin* (Bayrūt: Al-Mu'assasat al-'arabiyya lil-dirāsāt wa al-naṣr, 2013), 190; Qahwātī, *Dawr Al-Baṣrah al-Tijārī Fī al-Khalīj al-'Arabī, 1869-1914*, 278–94, 328–29.

16. James Toumey, "The Date Palm," *Arizona Agricultural Experiment Station's Bulletin* (Tucson, Arizona: The University of Arizona, June 1898), 146.

17. Ussama Makdisi, "Ottoman Orientalism," *The American Historical Review* 107, no. 3 (2002): 774.

Religious office, who toured the region around Basra on his way to India in 1886. In Beck's eyes, Iraq and Basra were so remote from the imperial heart that, albeit officially under Ottoman rule, they were foreign to state officials like himself. "Although it is a provincial center," Beck writes, "during my three days visit, I was not impressed with Basra; it is a small city of no more than 10,000 residents; the roads and buildings are in bad shape, and the heat is unbearable."¹⁸ Even Basra's governor (*vali*) Mehmed Hamdi Pasha asked to be restationed to a different province, for he could no longer bear the boiling summers.¹⁹ Ottoman officials used this alleged emptiness to justify the new imperial policies aimed at "redeeming" the people and the land from their misery and transforming Iraq into a "profit-generating garden of Eden."²⁰

Some Western commentators shared these views with their Ottoman contemporaries. Historian James Baillie Fraser based his *Mesopotamia and Assyria from the Earliest Ages to the Present Time* (1841) on western traveling literature. Fraser often portrays Mesopotamia, the land

18. Ḥarb and Ḥarb, *Rihlāt 'uṭmāniyyat̄ fī al-Ġazīrat̄ al-'arabiyyat̄ wa al-Hind wa Āsyā al-wuṣṭā*, 191.

19. Gökhan Çetinsaya, *Ottoman Administration of Iraq, 1890-1908*, SOAS/Routledge Studies on the Middle East (London; New York: Routledge, 2006), 67.

20. Camille Cole, "Nafia for the Tigris: The Privy Purse and the Infrastructure of Development in Late Ottoman Iraq, 1882–1914," *History of Science*, 2021, 7. In the early 20th century, the British adopted a similar language that saw Iraq as a place for implementing developmental projects. See: Priya Satia, "Developing Iraq: Britain, India and the Redemption of Empire and Technology in the First World War," *Past and Present* 197, no. 1 (2007): 211–55; Camille Lyans Cole, "Precarious Empires: A Social and Environmental History of Steam Navigation on the Tigris," *Journal of Social History* 50, no. 1 (2016): 74–101.

between the Tigris and the Euphrates, as a lawless and arid land that suffers from the political ineptitude of local leaders. The constant strife between the government and the local tribes made the rich lands of Mesopotamia “an unproductive desert.”²¹ Another British commentator, William Patrick Andrew of the Euphrates Valley Railway Corporation, described in 1857 the lands beyond Constantinople as “new and almost virgin land.”²² Andrew saw the alleged virginity of the region as an opportunity for progress and modernity. “The resource of Asia Minor for soil and pasturage,” he writes,

*“For timber and other vegetable products, and its valuable minerals, cannot be over-estimated... the valleys of the Euphrates and the Tigris only want the presence of man to gladden and cheer the onward course of their magnificent floods... There is no possible reason why, under such circumstances, the valleys of the Euphrates and the Tigris should not rival those of Ohio and the Mississippi or why they should not be, what they were of yore, the seat of rich and prosperous communities.”*²³

Therefore, Ottoman officials and western travelers framed Iraq in conflicting terms: it was simultaneously empty of any valuable economic activity yet bursting with potential. Basra represented past and present failures but promised future prosperity through state-led policies. Ottoman willingness to transform the local ecology and new

21. James Baillie Fraser, *Mesopotamia and Assyria from the Earliest Ages to the Present Time; with Illustrations of Their Natural History* (London: Simpkins, Marshall & Co., 1841), 24.

22. Andrew, *Memoir on the Euphrates Valley Route to India: With Official Correspondence and Maps*, 107.

23. Andrew, 107–9.

technological developments coincided with the arrival in 1869 of a new governor (*vali*) to Basra, Midhat Pasha, who had concluded a successful career in the empire's Balkan provinces. Midhat Pasha led a series of bureaucratic reorganization efforts to encourage agricultural expansion in the regions around Basra. He created five new sub-districts and implemented the Ottoman land law that the Ottomans had already introduced to other provinces in 1858.²⁴ With these policies, he hoped to expand agricultural production, control what farmers grew and when, and increase the state's tax revenues from land and agricultural taxes.²⁵ As one of the region's main crops and an essential source of income, dates proved central to this strategy.

With the new tax code in place, the state taxed date palm groves three times. First, landlords paid for the right to hold and cultivate the land. The primary measurement unit was called *Jarib*, each of about 4,000 square meters. Each *Jarib* in a date grove contained approximately 100 palms.²⁶ The Ottoman state then issued an additional tax

24. Qahwātī, *Dawr Al-Başrah al-Tijārī Fī al-Khalīj al-'Arabī, 1869-1914*, 35–38. The five sub-districts were Fao, Abi al-Hasib, Shatt al-Arab, Haratha, and Zahir.

25. Midhat Pasha's policies were meant to encourage farmers to develop their (now private) lands. His attempts, however, were later reversed by Sultan Abdülhamid II's new land policies, which in Iraq resulted in large shares of cultivated land returning to the hands of the state. See: Marion Farouk-Sluglett and Peter Sluglett, "The Transformation of Land Tenure and Rural Social Structure in Central and Southern Iraq, c. 1870–1958," *International Journal of Middle East Studies* 15, no. 4 (1983): 493–95; Cole, "Nafia for the Tigris: The Privy Purse and the Infrastructure of Development in Late Ottoman Iraq, 1882–1914," 7.

26. I found some uncertainty about the size of the *Jarib* and the number of trees it contained. The measures in the text are from Ḥamīd Aḥmad Ḥam-dān Tamīmī, *Al-Başrah Fī 'ahd al-Ihtilāl al-Barīṭānī, 1914-1921 : Dirāsah Ta'rikhiyah Wathā'iqiyah Lil-Awḍā' al-Siyāsiyah Wa-al-'askariyah*

for each tree. As of 1909, for example, the state collected 2.22 gurus²⁷ for every cultivated palm. Furthermore, the Ottoman tax code created a modular system that divided plots into three productivity levels. After harvest, the state appraised each grove and collected the qualified tax.²⁸ Lastly, the Ottomans also taxed any date shipment for export. In 1886, one Ottoman traveler estimated that the empire collected some 150,000 lira's worth of taxes on the fruit trade alone.²⁹

The expansion of date palm cultivation in late 19th-century southern Iraq resulted from western demands for Iraqi dates and Ottoman willingness to supply this demand while increasing the state's revenues from various agricultural taxes. Altering the local ecology into an export system changed southern Iraq's landscape. Whereas dates had played an integral part in the local ecology for thousands of years, by the turn of the 19th century, they became its ultimate monarch. One scholar estimated that the date-cultivation area around Basra increased by 25% from the 1870s to the 1890s.³⁰ The renowned plant explor-

Wa-al-Idāriyah Wa-al-Iqtisādiyah (Baghdad: Maṭba'at al-Irshād, 1979), 448. An essay appeared in *al-'iqtisā' i'āt l-'rabīa* states that each Jarib is made of roughly 5,000 square meters and can support around 100-130 trees. See: *al-'iqtisā' i'āt l-'rabīa*, 1.11.1936.

27. A gurus is an Ottoman currency unit.

28. Plots from the first tier were taxed at 170 gurus, those of 2nd tier at 150 gurus, and finally, poorly producing plots were taxed at 100 gurus. See: Tamīmī, *Al-Başrah Fī 'ahd al-Iḥtilāl al-Barīṭānī, 1914-1921 : Dirāsah Ta'rikhiyah Wathā'iqiyah Lil-Awḍā' al-Siyāsīyah Wa-al-'askariyah Wa-al-Idāriyah Wa-al-Iqtisādiyah*, 448.

29. Ḥarb and Ḥarb, *Riḥlāt 'uṭmāniyya fī al-Ġazīra al-'arabiyya wa al-Hīnd wa Āsyā' al-wuṣṭā*, 183.

30. Qahwātī, *Dawr Al-Başrah al-Tijārī Fī al-Khalīj al-'Arabī, 1869-1914*, 361.

er David Fairchild toured the region in 1903 and assessed the number of palm trees at 15-20 million.³¹ In 1916, an Indian judge named Cursetjee Manockjee Cursetjee traveled to the area and was immensely impressed by the number of date palms he witnessed. For him, southern Iraq was not the land of the Turks or the Arabs; it was “the land of the date.”³²

Date cultivation provided the Ottomans with a platform to better regulate and control a region they considered distant and unruly. More dates meant more tax collectors, costume clerks, and census officials that sustained Ottoman regulation over land, people, and commodities. They altered the local ecology into a cash crop system for export while tightening their control over the local population. Ottoman efforts to transform southern Iraq into a date palm commodity frontier were, therefore, part of their eco-political project in the region. At the same time, new technology and higher demand for Iraqi dates among western consumers accelerated the incorporation of the local date palm sector into global markets. The result was a new monoculture landscape ruled by date palms. Southern Iraq, therefore, is an example of how manipulating existing crops and lands results in a commodity frontier. At roughly

31. Fairchild “*Persian Gulf Dates and Their Introduction into America*,” 14.

32. C. M. Cursetjee, *The Land of the Date: A Recent Voyage from Bombay to Basra and Back, Fully Descriptive of the Ports and Peoples of the Persian Gulf and the Shat'-El-Arab, Their Conditions, History, and Customs: 1916-1917*, New ed (Reading, UK: Garnet Pub, 1994). Cursetjee recalled how: “Which ever (sic) way you turn the land is level, and the landscape is bounded by date-trees; nothing but date-trees – green, graceful, refreshing... standing on the steamer’s deck as we go up or downstream, you see nothing but endless tracts crowded with the ever-verdant, feathery foliage of the delightful date-palm.” See p. 129-30 in Cursetjee’s book.

the same time, American officials created a new date palm commodity frontier in the southwest United States.

CREATING A NEW DATE PALM COMMODITY FRONTIER
IN THE AMERICAN SOUTHWEST

Contrary to the Ottoman case, Americans used the notion of the frontier not to describe far-away peripheries but rather to dream about integrating new parts of the continent into the nation.³³ Settlers who migrated to far corners of the continent craved to discover, conquer, and develop the frontier. When the borders of the continental U.S. were finalized in the mid-19th century, westward expansion was over, and Americans had to find new ways to extract value from existing territories. While the temperate regions of northern California provided the perfect scenery for new agricultural projects, the arid lands in the southwest presented a series of climatic predicaments that jeopardized the expansion of agriculture.³⁴ To overcome these, a group

33. It is beyond the scope of this essay to delve into the vast literature about the frontier in American culture. In short, writers like Frederik Jackson Turner portrayed the development of the American west as an evolutionary process of transitions from primitive savagery to free land and eventually into urban zones. In contrast, American environmental historians of the late 20th century demonstrated that the expansion west involved the co-development of nature and culture rather than a complete subjugation of nature. For two separate environmental critiques of Turner's frontier thesis, see: Cronon, *Nature's Metropolis*; Worster, *Rivers of Empire*.

34. For more on the agricultural development of California, see: Steven Stoll, *The Fruits of Natural Advantage: Making the Industrial Countryside in California* (Berkeley: University of California Press, 1998); Ian R. Tyrrell, *True Gardens of the Gods: Californian-Australian Environmental Reform, 1860-1930* (Berkeley, Calif: University of California Press,

of botanists, horticulturalists, and federal agents began experimenting with cultivating date palms. As in the Ottoman case, creating an American date palm commodity frontier was part of a larger eco-political project to transform society and nature in the American southwest.

As we saw before, date consumption in the U.S. grew steadily during the 19th century. While Yankees developed an appetite for sweet fruits, they remained somewhat clueless about cultivating the palms. The first *Phoenix dactylifera* seeds that arrived in the continental United States hitchhiked their way across the Atlantic trade routes in the pockets and suitcases of 18th-century Spanish missionaries. Date palms were among the fruit trees the missionaries planted to secure a reliable food source for the Florida missions. Two major ecological predicaments prevented these palms from becoming a reliable food source. First, the humid climate of Florida hampered their ability to produce fruits. Second, these trees were seedlings, meaning that they originated from seeds. Seedlings have a fifty percent probability of being male palms (which produce no fruits), and since their genetic material is not identical to their mother tree, they sometimes produce unsavory fruits. Some early 19th-century accounts from St. Simon Island (present-day Georgia) point to some trees that originated from offshoots imported to the U.S. from Persia by John Couper, the own-

1999); Douglas Sackman, *Orange Empire: California and the Fruits of Eden* (Univ of California Press, 2005); David Hickman, "Landscapes of Green and Gold: The Environmental Vision of the California Horticulturalists, 1949-1900" (Ph.D. Dissertation, Davis, CA, University of California, Davis, 2011); Edward D. Melillo, *Strangers on Familiar Soil: Rediscovering the Chile-California Connection*, Yale Agrarian Studies (New Haven: Yale University Press, 2015).

er of Cannons Point Plantation.³⁵ Much like in the case of Florida, the humid shores of Georgia provided suboptimal conditions for the trees. Rather than becoming a source of revenue or food, they remained ornamental. While some trees “grew luxuriantly and to large size,”³⁶ in the mid-19th century, none was utilized as a commercial crop.

Farmers across the southwest began experimenting with date cultivation at the end of the 19th century. Their efforts bore mixed results. In 1875, for example, one Mr. Hanlon of southern California planted date seeds he brought from La Paz (Baja California). In 1882, his small grove of twelve palms produced between 120 to 650 pounds of dates annually, all consumed locally by people in the region.³⁷ Other farmers also tried cultivating dates from seedlings, but none accomplished an economically viable enterprise.³⁸ In October 1887, a farmer called F.C. Hatch sent the USDA offices in Washington D.C. some dates from a tree he grew on his property in Calistoga, California. The dates were “noted as being very sweet and rich,” but the entire bunch only weighed about five pounds.³⁹ Other farmers reported better results. In March of 1883, E. von Borstel sent a letter to the *San Francisco Rural Press*, where

35. Dennis Johnson and Jane McKnight, “Historic Cultivation of Date Palm (*Phoenix Dactylifera* L.) in Florida and Georgia,” *Palms* 65, no. 3 (2021): 149–52.

36. Liberty Hyde Bailey, *Cyclopedia of American Horticulture, Comprising Suggestions for Cultivation of Horticultural Plants, Descriptions of the Species of Fruits, Vegetables, Flowers, and Ornamental Plants Sold in the United States and Canada, Together with Geographical and Biographical Sketches*, vol. 1 (New York: Macmillan, 1900), 458.

37. Bailey, 1:458.

38. Toumey, “The Date Palm,” 106–9.

39. Toumey, 106.

he claimed that some 2,000 “palms in excellent growing conditions” grew on his father’s farm in Los Dolores, New Mexico.⁴⁰ Borstel contended that in 1882 these trees produced some 4,000 pounds of dates, “more dates than both myself and my workmen can eat.”⁴¹ Perhaps the most famous American attempt at date cultivation was the Wolfskill date. Named after John Reed Wolfskill from Winters, Yolo County, California, these dates are considered the first “American dates” not grown elsewhere on Earth. During the 1850s, Wolfskill planted seeds on his farm, giving them “careful cultivation, but no irrigation.”⁴² One commentator described the Wolfskill dates as “[dates] of a very beautiful red-wine color...about an inch and a quarter long, perfectly smooth.”⁴³ Despite some successful attempts, American farmers failed to develop a strong American date cultivation sector on their own. Then, along came the date boosters.

40. The letter is attached to a report written by W.G. Klee, a gardener in charge of agricultural ground at the University of California. the report reviews the main conclusion of Theobald Fisher’s newly published monograph about the date (*Petermann’s Geogr. Mittheilungen Ergänzungsheft* no. 64) and reflects on the future of the American date sector. See: W.G. Klee, “Culture of the Date” (Washington, D.C.: Department of Agriculture, 1883), 25.

41. Klee, “Culture of the Date”. Borstel’s account of his father’s farm raises some questions. For his grove to produce edible fruits, some of the trees needed to be male. Assuming that, in some miraculous way, the grove maintained the optimal 1:100 ratio of male to female trees, his farm contained roughly 1,950 female date trees. With an alleged bounty of 4,000 lbs., each of the “excellent growing” palms produced some two pounds of dates. It seems either Borstel overestimated the number of trees in his dad’s grove or that the trees were not as fruitful as he thought date trees should be. Or, and this is always an option, he was just bad at math.

42. Klee, “Culture of the Date,” 6.

43. Klee, 7.

By the late 19th century, a group of horticulturalists, botanists, plant explorers, and USDA officials began envisioning an American date sector in the southwest. I refer to them as *date boosters* because their actions were a part of a grander movement that changed the American landscape in the postbellum years. Like urban boosters that developed Chicago as a gateway to the west, the date boosters envisioned economic development based on natural conditions.⁴⁴ Whereas urban advocates preached about “the natural advantages that created cities,”⁴⁵ date boosters often focused on nature’s predicaments: drought, water availability, harsh humidity conditions, and land erosion. Rather than framing these as barriers to progress, they claimed that with the right crop – date palms – such pickles can become a source of growth.

Date boosters tried to convince farmers, botanists, and government officials that dates were a viable industry by pointing out the enormous economic potential of local cultivation. During the second half of the 19th century, date imports to the U.S. grew steadily, and by the last decade of that century, the market was valued at roughly \$400,000 to \$600,000 annually.⁴⁶ Rather than paying for imported fruits, Americans can grow their own dates and develop the southwest at the same time. One date booster, James

44. Cronon, *Nature’s Metropolis*, 34–41.

45. Cronon, 36.

46. James Toumey, “The Date Palm,” *Arizona Agricultural Experiment Station’s Bulletin* (Tucson, Arizona: The University of Arizona, June 1898), 146; Walter Swingle, “The Date Palm and Its Utilization in the Southwestern States,” *Vegetable Pathological and Physiological Investigations* (U.S. Department of Agriculture, Bureau of Plant Industry, April 28, 1904), 14. Adjusted to inflation rates, a \$600,000 market of 1890 is worth about \$19M today. See: <https://www.in2013dollars.com/us/inflation/1890?amount=600000>.

Toumey from the agricultural experimentation station at the University of Arizona, projected that “date culture will in time become an important industry over considerable areas of the interior arid region of the southwest, of which southern Arizona may be considered the center.”⁴⁷ Another booster, Robert Forbes (who replaced Toumey as the Arizona station’s manager) convinced Southern Pacific Rail Co. representatives to support the station’s operations by rhapsodizing the economic potential of developing date culture in the southwest.⁴⁸ Where other people saw vast, arid, and empty lands, boosters envisioned a flourishing green future.

With the promise of potential revenues, date palm cultivation embodied a promise of an imperial expansion into and ecological redemption of the American southwest through agriculture. As Frieda Knobloch noted, agriculture is not only about the act of cultivation but also involves a profound symbolic reconfiguration of land, crops, and people. By utilizing various plants as crops, agriculture is a process in which “an object became valuable... and [is] released from its past into the history of improvement.”⁴⁹ The Date palm’s ability to prosper in the harsh climate of the American southwest made it valuable both as a crop and as a tool to “release” the arid lands from their “past” into an era of progress and prosperity.

47. Toumey, “The Date Palm,” 130.

48. *Forbes to Bicknell*, 5.15.1900; *Forbes to Sproule*, 6.29.1900; *Forbes to Sproule*, 10.22.1901; *Forbes to Sroufe*, 4.26.1902. All the letters from the University of Arizona Special Collections (hereafter UA special collections), AZ 406, Box 11 folder 2; *Forbes to Albertson*, 10.11.1904, UA special collections, AZ 406, Box 11 folder 4.

49. Frieda Knobloch, *The Culture of Wilderness: Agriculture as Colonization in the American West*, Studies in Rural Culture (Chapel Hill: University of North Carolina Press, 1996), 16.

Consider, for example, how boosters framed date palms as a potential solution for the alkali soil of the region. Soil with a high concentration of minerals – also known as alkali soil – was a major predicament for agriculturalists in the southwest. Most crops known to American farmers at the end of the 19th century, including citrus, grains, and vegetables, cannot be grown in alkali soil. The grand federal irrigation projects that changed the southwestern landscape increased this problem.⁵⁰ In 1902, Robert Forbes from the Phoenix agricultural experiment station published a report about the soil around the Salt River Valley on the outskirts of Phoenix, AZ. He warned about the “rise of the alkali,” concluding that “irrigation... has greatly changed the amount and distribution of alkali” by bringing new salts to the region and elevating existing minerals from lower ground levels. He proposed flooding the area or planting it with drought-resistant crops like German and Common millet, sour clover, and barley. However, Forbes knew all too well that these were only temporary solutions: once a regular irrigation regime resumed, the alkali would rise again. The date tree provided a third path out of the alkali turmoil. Although young dates may die in alkali soil if not properly cared for, mature trees flourish even in harsh conditions.⁵¹ Date palms were ecological organisms that enabled political, economic, and social change.

50. For more on irrigation and the southwest, see: Worster, *Rivers of Empire*; Fiege, *Irrigated Eden*.

51. Forbes shared his concern about the sensitivity of date suckers with some of his peers. See, for example: *Forbes to Swingle*, 3.7.1901, UA special collections, AZ 406, Box 11, Folder 1; *Forbes to Sroufe*, 4.26.1902, UA special collections, AZ 406, Box 11, Folder 2; *Forbes to Johnson*, 5.27.1902, UA special collections, AZ 406, Box 11, Folder 6.

Since dates had never been grown commercially on U.S. soil, boosters' efforts to create a new date palm commodity frontier in the southwest concentrated on importing date palm offshoots from the Middle East. A short detour into the biology of the date palm may explain why boosters engaged in such a laborious practice. Date palms that grow out of seeds (also known as seedlings) have two main problems. First, there is a fifty percent chance that the new tree will turn out to be male. Male date palms provide pollen, which is essential to the pollination process, but they bear no fruits of their own and therefore are considered commercially worthless. The second problem is that, even if the new seedling tree turns out to be female, it will most likely not be true-to-type with the "mother" tree. Offshoots, tiny sprouts that grow out of the base of the palm, are genetically identical to the "mother" tree. These offshoots, therefore, provide the genetic baseline for a predictable and identical grove and serve as a crucial foundation for every new grove.

Early imports of offshoots to the U.S. relied on western agents stationed in the Middle East. For example, during the 1870s, Gen. Charles P. Stone, a member of the Khedival army and later a key figure in the Statue of Liberty project, helped the USDA to import some offshoots from Egypt.⁵² In the summer of 1890, H.E. Van Demon of the USDA imported some 59 offshoots from Cairo with the help of European and American agents.⁵³ Despite the great effort

52. Walter Swingle, "The Date Palm and Its Culture," *Yearbook of the Department of Agriculture*, 1900, 459.

53. Toumey, "The Date Palm," 113–14. Van Demon, a professional pomologist, was later in charge of writing the section on dates in Bailey's ambitious *Cyclopedia of American Horticulture*.

to import offshoots from Egypt, only a few trees matured. Planted in various spots across Arizona and California, the poor suckers met their death in floods (Yuma), frost (Las Cruces, Pomona, Tulare), or hungry gophers (Pomona). Some survivors turned out to be male and bore no fruits; others were allowed to spring dozens of offshoots that burdened the “mother” tree.⁵⁴ Some, like the ones sent to Frank Kimbell’s farm in National City, CA, were dug out and replaced by oranges. When federal agents questioned his decision, Kimbell replied: “I know what a navel orange tree is worth; I do not know what a date tree is worth.”⁵⁵ For a moment in the mid-1890s, it seemed like the efforts of date boosters were in vain and that the date would join other crops like tea, coffee, bananas, and pineapples – all were tested for commercial cultivation in the southwest but failed, and their supply remained exclusively dependent on imports.⁵⁶

By the late 19th century, the federal government decided to try a different approach. In 1898, secretary of agriculture James Wilson established the *Section of Seed and Plant Introduction* (SSPI) to enlarge the number of

54. *Van Deman to Gulley, 4.8.1891; Van Deman to Gulley, 9.30.1891*, UA special collections, AZ 406, Box 11, Folder 2; Toumey, 117–23.

55. Toumey, 121.

56. John E. Baur, “California Crops That Failed,” *California Historical Society Quarterly* 45, no. 1 (1966): 41–68. One notable exception to the poor results of these early attempts was the case of Mr. P.H. Gale from Indio, California. Six of the suckers that were imported by the USDA from Egypt and Arabia in the early 1890s were given to the Southern Pacific Railroad, which gave those to Gale. By 1898 three died, and the rest flourished to the point that they were able to grow their own suckers. Pleased with their growth, Gale promised to send the new offshoots back to the USDA, together with some seedlings who, at the age of three, were now “growing very rapidly.” See: Toumey, “The Date Palm,” 124.

plants cultivated by American farmers.⁵⁷ The SSPI hired botanists, horticulturalists, and plant enthusiasts from across the U.S. and trained them to become *plant explorers* – federal agents in charge of traveling around the globe to collect new plants suitable for commercial cultivation in America.⁵⁸ With funding from the federal government and some private investors, plant explorers were able to import a larger-than-ever number of offshoots. For example, during the first two weeks of June 1900, Walter Swingle embarked on a journey to the date oasis in Biskra, Algeria. There, he purchased some 447 offshoots from nearby groves using the help of French officials and one local proprietor named M. Yahia ben Kassem. To avoid the problems of past shipments, Swingle personally selected and packed each offshoot. In mid-June, the suckers left Algeria on the *Gottfried Schenker* steamer. By July 17th, after two short stops in NYC and New Orleans, the offshoots arrived at the palm garden in Tempe, Arizona, where they were unpacked and fumigated later that month. In October of that year, station manager Forbes reported that “93% of the plants... [are] safe, and some of them were beginning to grow.”⁵⁹

It took several more years for the American date palm commodity frontier to begin satisfying the local demand. Date cultivation in the American southwest grew steadily

57. Howard L. Hyland, “History of US Plant Introduction,” *Environmental Review: ER*, 1977, 28.

58. For an interesting account of plant explorers’ training, see: Xan Sarah Chacko, “When Life Gives You Lemons: Frank Meyer, Authority, and Credit in Early Twentieth-Century Plant Hunting,” *History of Science* 56, no. 4 (2018): 432–69.

59. W. T. Swingle “*The Date Palm and Its Culture*,” 44.; *Forbes to Darwin*, 11.24.1900, UA special collections, AZ 406, Box 11, Folder 2.

during the first two decades of the 20th century. In 1902, the humble date orchard at the University of Arizona's Tempe site contained just over 600 trees of eighty varieties. In 1913, American farmers produced 7,500 lbs. of dates in various farms across Arizona and California, but local consumption still relied on imports from the Middle East. By 1921, date palm farmers in the Coachella Valley, CA produced some 100,000 lbs. of dates from varieties better suited to the local climate - *Zahidi*, *Maktum*, *Dubaini*, *Asharasi*, *thuri*, *Deglet Nur*, *Tafazwin*.⁶⁰ Their peers in the Imperial Valley grew some 5,000 pounds. By the 1930s, the California date sector officially replaced the imports from the Middle East.⁶¹

CONCLUSION

During the late 19th century, date palm cultivation expanded to new regions in Ottoman Iraq and the American southwest. These locations shared climatic conditions that fitted perfectly to cultivating date palms. Moreover, the late 19th-century Ottoman and American empires utilized date cultivation to expand their agricultural schemes into previously uncultivated and arid lands to produce wealth and

60. Forbes, "Thirteen Annual Reports, Consisting of the Reports of the Departments of Administration, Agriculture and Horticulture, Animal Husbandry, Botany, and Chemistry" (Tucson, Arizona: University of Arizona Agricultural Experiment Station, December 20, 1902), 240; "Statistical Report, 1913" (California State Board of Agriculture, 1913), 107; "Statistical Report, 1921" (California State Board of Agriculture, 1921), 225.

61. Matthew S Hopper, *Slaves of One Master: Globalization and Slavery in Arabia in the Age of Empire* (New Haven: Yale University Press, 2016), 191.

strengthen their political control over these territories. Despite the similarities, the unique unfolding of these efforts resulted from their different political, cultural, and agricultural baseline. In Ottoman Iraq, farmers had cultivated dates for thousands of years, mainly for local consumption. When Ottoman officials decided to expand traditional trade routes, they had to *adapt* local cultivation schemes to the new agriculture system oriented to cash crops and exports. In the U.S., however, dates had never been cultivated for commercial purposes. To harness the date palm for their imperial cause, American officials had to *create* a new commodity frontier.

The simultaneous rise of these two date palm commodity frontiers resulted primarily from the Ottoman and American reconfiguration of their respective frontiers. Imperial agents in the Ottoman and the American frontiers looked for a way out of the critical imperial vertigo of the late 19th century: as both empires could no longer expand to new territories, they began rethinking spatial organization within their existing borders. Soon, it became clear that the remaking of society must go hand in hand with reconfiguring ecological systems. Their new eco-political projects involved reorganization of the two in tandem. The technological developments of that time and the rising demand for raw materials among western consumers created the material infrastructure for absorbing these frontiers into global capitalist markets.

The International Rubber Regulation Agreement and the Remaking of the British Empire in the Bay of Bengal

Siddharth Sridhar

Returning from a fact-finding mission to Ceylon, Malaya, and the Netherlands East Indies (NEI) in 1928, Parliamentary Under-Secretary for the Colonies, W.G.A. Ormsby-Gore worried for the future of plantation rubber in the British Empire. Ormsby-Gore warned Parliament that the Stevenson Scheme¹ had caused a significant expansion of rubber planting in the NEI by European estates and “native smallholders”, such that the Empire’s share of world exports fell

1. The Stevenson Scheme (1922-28) regulated exports of natural rubber from Ceylon and Malaya, aiming to raise prices after the 1920-22 rubber depression.

from 70% to 52% between 1922 and 1927 while that of the NEI rose from 25% to 40%.² Ormsby-Gore was convinced that “Government interference was tending to undermine efficiency, to handicap scientific development, and to discourage a progressive attitude to the problem of higher yields and improved methods of cultivation.”³ By 1928, the Stevenson Scheme – launched in 1922 by then Secretary for the Colonies, Winston Churchill – was unable to achieve its “pivotal price” of 1s 9d.⁴ Cabinet announced the end of rubber restriction in October 1928 and Malayan planters set out to recapture their share of world rubber markets.

The end of restriction in 1928 coincided with the tail of the 1920s commodities boom. Exports of natural rubber, the key raw material for automobile tires, rose by 32% in 1929 while consumption increased by 17.5%; Malayan exports jumped by 54%, primarily from Malay smallholdings and Asian estates under 100 acres.⁵ Within a year, the Great Depression⁶ swept across Europe and North America, causing bank failures, mass unemployment, and plummeting consumption, particularly for durable goods like automobiles.⁷ World rubber consumption fell to 1928 lev-

2. W.G.A. Ormsby-Gore, “Report by the Right Honourable W.G.A. Ormsby Gore, MP on his Visit to Malaya, Ceylon, and Java during the year 1928,” (London: HM Stationery Office, 1928), 139.

3. Ormsby-Gore, “Visit to Malaya, Ceylon, and Java,” 136.

4. John H. Drabble, *Malayan Rubber: The Interwar Years* (Hong Kong: Macmillan, 1991), 17. “Pivotal Price” refers to the target price for rubber set for 1 pound of “No. 1 Ribbed Smoked Sheet” exchanged in London. When prices fell below the “pivotal price”, export limits would be lowered and *vice versa*.

5. Drabble, *Malayan Rubber*, 18.

6. Also called “The Slump”.

7. P.T. Bauer, *The Rubber Industry: A Study in Competition and Monopoly* (Cambridge, MA: Harvard University Press, 1948), 26: “In 1929

The International Rubber Regulation Agreement

els (700,000 tons) but exports decreased at a much slower rate, remaining above 1928 levels. As a result, stocks ballooned by a factor of 2.5 by 1932 and the price of one pound of No. 1 Ribbed Smoked Sheet (RSS) in London collapsed from 1s 7d in 1928 to a low of 1.5d in 1930.

The collapse in the value of rubber exports from British Malaya and the NEI resulted in fiscal crises and collapses in imports of consumer goods.⁸ The dire straits of the rubber industry – the chief US Dollar earner of the British Empire – forced the UK, the Netherlands, and France to bind their Asian colonies to the International Rubber Regulation Agreement (IRRA) in May 1934. From June 1934 until the fall of Singapore to Japan in 1942, rubber exports were governed by an inter-imperial committee of Agency House directors and colonial officials in London.⁹

RUBBER REGULATION, CARTELS, AND EMPIRE

Scholarship on rubber in the interwar era has been limited to economists concerned with cartelization,¹⁰ historians of the American rubber industry,¹¹ and economic historians

the output of automobiles [in the USA] reached 5,358,000 units; in 1932 it was 1,371,000 units, the lowest since 1915... American output of tyres fell from about 77 millions in 1928 to about 40 millions in 1932.”

8. Bauer, *The Rubber Industry*, 15-23.

9. Campbell simultaneously chaired the International Tin Committee. Jamie Martin, *The Meddlers: Sovereignty, Empire, and the Birth of Global Economic Governance* (Cambridge: Harvard University Press, 2022).

10. Bauer, *The Rubber Industry*; K.E. Knorr, *World Rubber and Its Regulation*, (Stanford: Stanford University Press, 1945).

11. J. Tully, *The devil's milk: A social history of rubber*. NYU Press, 2011; Greg Grandin, *Fordlandia: The Rise and Fall of Henry Ford's Forgotten*

of colonial Malaya.¹² Writing just after the Second World War, American economists like P.T. Bauer and K.E. Knorr decried the artificial inflation of rubber prices by a cabal of European investors unconcerned with consumers in the US and Europe, smallholding producers in South and Southeast Asia, and technological stagnation in the industry.¹³ G. Grandin and G. Mittman discuss the role of the Stevenson Scheme in fueling the neo-colonial ambitions of American industrialists and politicians like Henry Ford, Harvey Firestone, and Herbert Hoover.¹⁴ J. H. Drabble argues that, while the agreement depended on the cooperation of leading rubber interests, it was essentially a British Colonial Office (CO) project to stabilize the price of rubber, rather than company profits.¹⁵ Drabble and N.J. White contend that the history of the IRRA demonstrates the significance of the will of individuals like John Campbell, Economic Adviser to the UK Secretary for the Colonies, and John G. Hay, Director of Guthrie & Co., the globe-spanning agency house.¹⁶

Jungle City (New York: Metropolitan Books, 2009); Gregg Mittman, *Empire of Rubber: Firestone's Scramble for Land and Power in Liberia* (New York: The New Press, 2021).

12. James C. Jackson, *Planters and Speculators: Chinese and European Agricultural Enterprise in Malaya, 1786-1921* (Singapore: University of Malaya Press, 1968); Drabble, *Malayan Rubber: The Interwar Years*; N. J. White, *Business, Government, and the End of Empire* (Oxford: Oxford University Press, 1996).

13. Bauer, *The Rubber Industry*; Knorr, *World Rubber and Its Regulation*.

14. Grandin, *Fordlandia: The Rise and Fall of Henry Ford's Forgotten Jungle City*; Mittman, *Empire of Rubber: Firestone's Scramble for Land and Power in Liberia*.

15. Drabble, *Malayan Rubber*.

16. Drabble, *Malayan Rubber*; White, *Business, Government, and the End of Empire*.

Conventionally, cartels are condemned as uneconomic structures that transfer surpluses from consumers to inefficient producers. Harm Schröter suggests that this orientation followed the post-WWII prohibition of cartels in Germany, the heart of cartelization in Europe.¹⁷ Following Alfred Chandler's characterization of business orientations - competitive, personal, and cooperative - Schröter contends that European states took different approaches to cartelization and de-cartelization depending on the "political and economic power of partisans of cooperative and competitive capitalism."¹⁸ As opposed to Chandler's conception of the "normal" path of growth from family to managerial enterprise, Schröter argues cartelization constitutes an "alternative path of growth" that sits, following Bouwens and Dankers, on a spectrum from competitive markets to formal hierarchies.¹⁹ Jeffrey Fear explains that cartels "do not abolish competition, but regulate it" as a "subset of inter-firm cooperation, which ranges from highly fluid spot markets... to fully integrated enterprise hierarchies."²⁰ Fear

17. Harm G. Schröter, "Cartelization and Decartelization in Europe, 1870-1995: Rise and Decline of an Economic Institution," *The Journal of European Economic History* 25, no. 1 (1996): 143.

18. Schröter, "Cartelization and Decartelization in Europe, 1870-1995," 152.

19. Harm G. Schroter, "Cartels Revisited: An Overview on Fresh Questions, New Methods, and Surprising Results," *Revue Économique* 64, no. 6 (2013), 1001; B. Bouwens and J. Dankers, "Competition on the catwalk, coordination and concentration in Dutch Business; the sequence of collusive practices, 1900-2000," *Converging Varieties of Capitalism; towards a global competition policy 1930-2000, XVth World Economic History Congress, Utrecht, The Netherlands, 3-7 August 2009*, quoted in Schröter, "Cartels Revisited," 1000.

20. Jeffrey Fear, "Cartels," in *The Oxford Handbook of Business History*, ed. Geoffrey Jones and Jonathan Zeitlin (Oxford: Oxford University Press, 2007), 269, 271.

draws from Dominique Barjot²¹ to argue that “few cartels actually achieved monopolies, and many were established with the implicit aim to *preserve* competitors rather than competition.”²² This historiography of cartels is complemented by studies of business interest associations (BIAs), which coordinate inter-firm cooperation towards political outcomes. Surveying the literature, Luca Lanzalaco concludes that BIAs, as manifestations of capitalist collective action, emerge and operate in relation to both *inter-* and *intra-*class dynamics, depending on local historical dynamics.²³ Both cartels and BIAs can be seen as organizations with a class interest, allowing firms to act *collectively*, counterposed by class antagonists.

Business histories of cartels and BIAs pay close attention to the role of nation-states, but largely exclude the colonial world. Conversely, when imperial historians explore capitalism and empire, the firm takes a back seat; indeed, the joint-stock corporation is only prominent in the historiography of the British Empire up to 1857, when the East India Company’s domains passed to Crown control.²⁴ The pivotal debate on the relationship between enterprise and the imperial state beyond 1857 was launched by Gallagher and Robinson’s “Imperialism of Free Trade,” which generated interest in the degree of formality of em-

21. Dominique Barjot, ed., *International Cartels Revisited 1880-1980* (Caen: Editions-Diffusion du Lys, 1994) cited in Fear, “Cartels.”

22. Fear, “Cartels,” 271.

23. Luca Lanzalaco, “Business Interest Associations,” in Jones and Zeitlin, 2007.

24. Exception for the history of British imperialism in West and South Africa. A.G. Hopkins, “Imperial Business in Africa. Part I: Sources,” *The Journal of African History* 17, no. 1 (1976): 29-48.

pire.²⁵ When complicated with the world-systems perspective on the long cycles of imperial expansion and transformation, this framework offers significant insight into the complexity and multiplicity of hierarchical arrangements that produce and reproduce imperial formations.²⁶ However, these approaches tend to view corporations as little more than the legal form of capitalists in the City of London. Here, Phillip Stern's work on the East India Company as a paradigmatic example of state-corporate cooperation in colonialism is particularly important.²⁷ Stern's contention that corporations were involved in a "variety of competing and overlapping political and constitutional forms in both alliance and tension with the national state and its claims to coherent and central power" that constituted early modern empire is especially useful in examining the role of firms in 20th century imperialism.²⁸

This chapter intervenes in these discussions by exploring the *inter-* and *intra-*class dynamics of the negotiation and operation of the IRRA. I argue that the IRRA complicates our understanding of capitalist collective action by showing how a network of metropolitan statesmen and rubber investors stretching across London, Amsterdam, and Paris coop-

25. John Gallagher and Ronald Robinson, "The Imperialism of Free Trade," *The Economic History Review* 6, no. 1 (1953): 1-15. Peter Cain and A.G. Hopkins, *British Imperialism: 1688-2015* (London: Taylor & Francis, 2015).

26. Giovanni Arrighi, *The Geometry of Imperialism* (London: Verso, 1983); Giovanni Arrighi, *The Long-Twentieth Century: Money, Power, and the Origins of Our Times* (London: Verso, 2010); Immanuel Wallerstein, *The Modern World System, Vol. I-III* (Berkeley: UC Press, 1974-89).

27. Phillip J. Stern, *The Company State: Corporate Sovereignty and the Early Modern Foundations of the British Empire in India* (Oxford: Oxford University Press, 2011).

28. Stern, *The Company State*, 6.

erated to preserve imperial flows of rents in a context of hegemonic contestation. The international rubber cartel aimed to preserve some competitors – European plantation companies – while suppressing others, such as producer-manufacturers like Dunlop and US Rubber, but especially peasant smallholders in Malaya and the NEI's Outer Islands.

In the following section, I lay out the political-economic context of rubber regulation; that is, the tenuous position of the UK vis-à-vis the US. I then turn to the negotiation and operation of the IRRA, exploring the interplay of pecuniary interest and ideological principles across institutions from London to Batavia, involving statesmen, investors, planters, and administrators. Throughout, I emphasize the interventions of the International Rubber Regulation Committee [IRRC] in intra- and inter-class conflict across the British and Dutch Empires in Southeast Asia.

THE POLITICAL ECONOMY OF IMPERIAL RENEWAL
(1918-1934)

The interwar years saw the UK abandon its leadership of the international liberal trade regime, seeking a consolidated imperial bloc to protect its industries from American and Japanese competition. Steven Lobell argues that the UK's transformation from "liberal hegemon" to "imperial hegemon" between 1903 and 1932 follows the shift of competitors like Germany, Japan, and Italy towards autarky and the US and France towards protection and self-sufficiency.²⁹ Lobell suggests that the competition faced by the

29. Steven E. Lobell, "Second Image Reversed Politics: Britain's Choice of Freer Trade or Imperial Preferences, 1903-1906, 1917-1923, 1930-1932," *International Studies Quarterly* 43 (1999): 671-694.

UK in world markets and the Empire, and pressure of domestic unemployment during depressions in 1920-22 and 1929-32, shifted the domestic coalition behind free trade – export oriented industrialists, financiers, the working class, and highly efficient firms – towards the position of the imperialists, made up of inefficient industries, military interests, colonial pressure groups, and agricultural interests. The decline in Britain's share of world exports from 13.9% in 1913 to 10.8% in 1929, and its share of exports of manufactured goods from 29.9% to 23.6%, due in part to trade barriers erected by the US and Japan, dealt a powerful blow to the free trade consensus of 19th century Pax Britannica.³⁰

Japanese competition threatened Lancashire cotton interests and their dwindling export markets in India, Malaya, and China, but it was American financiers that presented the key challenge. The transformation of the UK from a global creditor to a debtor of the US during the Great War fundamentally changed the relationship between the City of London and Wall Street. Robert Self contends that UK war debts to the US after 1918 reversed the position of Sterling and the US Dollar.³¹ The combined pressure of

30. Lobell, "Second Image Reversed Politics."

31. Robert C. Self, *Britain, America and the war debt controversy: the economic diplomacy of an unspecial relationship, 1917-1941* (New York: Routledge, 2006). Inter-allied war debts amounted to US\$26.5 billion, with the UK a net creditor of US\$6.4 billion, owing the United States US\$4.6 billion while being owed \$11.1 billion by 17 states. Britain guaranteed French, Russian and Italian borrowing in New York. By 1917 Britain exhausted its resources through purchases in an inflationary US, with dollar assets sufficient to cover three weeks of purchases and assets in the Bank of England and other banks reduced to US\$114 (gold). After American entry, the US Treasury issued massive loans to the Allies, leaving Britain indebted to the tune of \$4,277 million to the US.

war loans, the restoration of the gold standard, a steep decline in exports (to 75.8% of 1913 levels by 1924), and a fall in what Tim Rooth calls “invisible earnings” from loans to foreign and empire governments put Sterling balances in a precarious position.³² In 1929 “Sterling balances were already considerably larger than £275 million while reserves were only £146 million”, with confidence in Sterling shaken by the war, trade balances worsening with the Americas, the Indian surplus declining, and exports to US Dollar-earning colonies like Malaya threatened by Japanese competition.³³

Precarious “Sterling balances” catalyzed Churchill’s attempt to rescue rubber interests in the 1920s. Rubber displaced tin as Malaya’s chief US dollar-earning export during the Great War, constituting 72% of the export value of the FMS in 1917 and remaining above 50% in the inter-war period.³⁴ Rubber prices collapsed during the 1920-22 depression and stocks ballooned to twelve months’ consumption.³⁵ Attempts at voluntary restriction by Rubber Growers Association [RGA] members had little effect and Churchill launched the Stevenson Scheme in September 1922, “with the double object of saving the rubber planters, and, by making the Americans pay, contribute materially to stabilizing the dollar exchange.”³⁶

32. Tim Rooth, *British protectionism and the international economy: overseas commercial policy in the 1930s* (Cambridge: Cambridge University Press, 1992), 26.

33. Rooth, *British protectionism and the international economy*, 28.

34. Drabble, *Malayan Rubber*, 11.

35. Drabble, *Malayan Rubber*, 13. Prices of RSS No. 1 in London fell from 2s 10d in 1920 to 6³/₄d in mid-1922.

36. FO Minute, 20-9-1922, in Drabble, *Malayan Rubber*, 13.

The International Rubber Regulation Agreement

The inflexibility of the scheme caused a “rubber famine” in 1924-25, when an explosion of demand in the US pushed prices to 4s 8d, with formulaic increases unable to counteract demand *and* speculation.³⁷ The rubber famine enraged American Secretary of Commerce Herbert Hoover, who sought a US-dominated source in the Philippines, Brazil, and Liberia.³⁸ The “Big Five” Rubber manufacturers - US Rubber, Firestone, Goodyear, Goodrich, and Fisk - even formed a buying pool to build up buffer stocks.³⁹ Inflated rubber prices also led the NEI government to encourage European-owned plantation companies and Malay smallholders to plant rubber in the Outer Islands, with estates investing heavily in bud-grafting techniques developed by the Buitenzorg Botanical Garden.⁴⁰ As a result, rubber never reached the pivot price again and Malaya and Ceylon’s share of world exports tumbled from 72 to 53%, losing primarily to the NEI.⁴¹ The inability of the Empire to sustain rubber prices, the failure to persuade the Dutch to join the scheme, and the ability of American companies to disrupt the scheme underscored the limits of British hegemony. The market share lost to European estates and Malay smallholders in the NEI crippled the Empire’s freedom of action in the 1930s, when rubber prices collapsed

37. Drabble, *Malayan Rubber*, 15. Rates only reached 100% when prices had begun to decline in Feb-April 1926.

38. Grandin, *Fordlandia*. Mittman, *Empire of Rubber*. Ford and Firestone aggressively invested in rubber estates on concessions greater than a million acres in Brazil and Liberia.

39. Drabble, *Malayan Rubber*, 17.

40. Drabble; Bauer, *The Rubber Industry*.

41. Drabble, 17-18. Malayan planters also lost market share to Siam and Indo-China.

to a new low, threatening the viability of European plantations in Malaya.

Rubber, due to its adaptability to Southeast Asia, the longevity of trees (productive for up to 35 years), and flush production after periods of rest, is uniquely susceptible to overproduction. During booms, such as in 1910-14 and the era of the Stevenson Scheme, extensive planting by firms and smallholders created a vast surplus of capacity 5 to 7 years in the future, which might or might not coincide with increased demand. Bauer argues that demand for rubber was relatively elastic as it was a component of a consumer good – automobiles – that was itself a derived demand for individual transportation and could dry up in downturns, especially when automobile production and consumption was concentrated in the US.⁴² Further, while European estates featured high costs of production at stagnating yields by the 1920s, smallholders could tap rubber at very low prices by relying on share-tappers and family labor, switching to food production when prices fell below a very low level which officials could not predict. Following David Harvey, we observe that interwar rubber featured a periodic crisis of the overaccumulation of capital with the added problem that the rubber tree as a productive asset was improved by periods of disuse.⁴³

The 1920s saw the British Empire in crisis. Sterling balances were precarious and the flow of US Dollars through the empire was threatened by the pressure of war loans, the steady loss of colonial markets for textiles, iron, steel,

42. Knorr, *World Rubber and Its Regulation*, 73.

43. David Harvey, *Limits to Capital* (Chicago: University of Chicago Press, 1982). After periods of rest, rubber trees produced at higher yields. This was observed in Malaya in 1929-32 and at the end of WWII.

The International Rubber Regulation Agreement

and capital goods to the US and Japan, as well as India and China, and periodic slumps of Empire commodities like rubber, tin, cotton, and oilseeds. This economic context propelled the sustained shift of export-oriented manufacturers, workers, and banks from the free traders to the protectionist-imperialists. This shift in political coalitions, the creation of a new common sense, drove the Ottawa Conference of 1932 and the policy of Imperial Preference, an attempt to reproduce imperial hegemony by deepening the ties between the metropole, dominions, colonial empire, and India. McKenzie and Rooth argue that the sheer commercial-industrial power of the United States and the decline in British competitiveness in key industries vis-à-vis the Continent and Japan meant that the dominions and India saw their interests align squarely with industrial self-sufficiency.⁴⁴ While the Ottawa Conference produced 17 bilateral agreements for imperial tariff preferences, it did not result in the renewal of the Empire as the world's dominant economic bloc.

NEGOTIATING THE IRRA: CORPORATIONS AND THE EMPIRE IN THE GREAT DEPRESSION

In November 1929, veteran planter Sidney Parry called on Secretary for the Colonies, Lord Passfield, to launch

44. Francine McKenzie, "Imperial Solutions to International Crises: Alliances, Trade and the Ottawa Imperial Economic Conference of 1932," in *The Foreign Office, Commerce and British Foreign Policy in the Twentieth Century*, ed. John Fisher, Effie GH Pedaliu and Richard Smith (London: Palgrave Macmillan, 2016), 180; Rooth, *British Protectionism and the International Economy*.

Anglo-Dutch negotiations on rubber regulation.⁴⁵ Parry raised the specter of war loans and the considerable investment of British capital in Malaya – to the tune of £100 million – which registered a loss of £37 million in 1929, roughly equal to the loans payable to the US that year.⁴⁶ Significantly, Parry noted that the “question of native plantations is the pivotal one round which the whole future of Rubber Production revolves.”⁴⁷ The rubber intelligence firm Charles Hope & Son warned that “the price [was] now well below the cost of production of the most economically-run estate ... Governments will lose their revenue, hundreds of planters will be without occupation, many thousands of coolies will have to be repatriated, innumerable small native producers will be unable to purchase the necessities of life, many thousands of shareholders will lose all their savings, some will be left destitute, ‘and one promiscuous ruin cover all.’”⁴⁸

While directors and planters clamored for an Anglo-Dutch restriction scheme, they were opposed by “producer-manufacturers” like Dunlop Rubber Company and US Rubber, who operated plantations in Malaya and the NEI, and found themselves paying higher prices for their own rubber than competitors buying rubber on the open

45. CO 825/4/14, Eastern 1929, “Rubber Restriction: Dutch and English cooperation”, 45-46. Parry was a director of 9 Sterling rubber companies, *National Archives of the United Kingdom [NAUK]*.

46. CO 825/4/14, Eastern 1929, “Rubber Restriction: Dutch and English cooperation”, 45-46.

47. CO 825/4/14, Letter, M. Sidney Parry to Lord Passfield on 18-11-29, 39-40. *NAUK*.

48. CO 825/7/5, Eastern 1930, “Rubber Restriction: Dutch and English cooperation”, “Rubber: 3rd September, 1930”, Charles Hope & Son Rubber Department, 53-55, *NAUK*.

market.⁴⁹ While they won the support of planters in Malaya, both Chinese and European, they were opposed by local chambers of commerce, and the Malayan Civil Service (MCS).⁵⁰ The MCS, exemplified by FMS High Commissioner Cecil Clementi, were supported by their NEI counterparts, who considered compulsory restriction impracticable. In essence, they lacked the administrative capacity to register the hundreds of thousands of smallholders practicing shifting cultivation in the NEI's Outer Islands.⁵¹ Clementi warned that unilateral action would be "worse than useless" and that "economic laws must be allowed to take their course" and Lord Passfield agreed, telling the RGA to negotiate directly with its Dutch counterpart, the IAROC.⁵²

Plantations were faced with three options: maximize production to minimize unit costs; concentrate production on the most efficient areas; or place estates on "care-and-maintenance."⁵³ Complete closure was a death-blow as it meant repatriating the estate labor force to India, drying up cash-flows, and raising costs of re-opening when conditions improved.⁵⁴ Drabble notes that between 1930 and 1932 most European estates produced at capacity with an RGA sample of 615 companies consistently producing

49. CO 825/7/5, "Rubber: 3rd September, 1930", 53, *NAUK*.

50. CO 825/7/5, Extract, LegCo Proceedings of Straits Settlements, 25th August, 1930, 28-36, *NAUK*.

51. CO 825/7/10, "Rubber (General)", Jonkheer de Graeff, "Views on Rubber Restriction in the Netherlands East Indies", presented to Clementi in Batavia, 27-8-30, *NAUK*.

52. CO 825/7/10, Letter, Clementi to Lord Passfield, 6-9-30, 86-90; CO 825/8/6, "Anglo-Dutch Cooperation on Rubber 1930," Letter, EB Boyd to HS Abrahamson, 11-9-30, 110-111, *NAUK*.

53. H.N. Whitford in Drabble, *Malayan Rubber*, 49.

54. H.N. Whitford in Drabble, *Malayan Rubber*, 49.

around 250,000 tons per year.⁵⁵ Maintaining production required steep economies to minimize costs, particularly in payroll, affecting European supervisors and their Tamil and Chinese labor forces.⁵⁶ Combined with rent relief from the Malayan administrations and economies coordinated across estates by Agency Houses, Sterling rubber companies were able to bring down their f.o.b costs (up to port of shipment) to a low of 1.68 d/lb., at yields of 450 lb./acre, still less efficient than Asian estates and locally incorporated firms.⁵⁷

The resounding victory of the protectionist National Government in 1931 replaced Lord Passfield at the CO with Phillip Cunliffe-Lister, former head of the Tin Producers Association, who supported the “rational production of primary products” and championed the 1931 International Tin Control agreement as a model for other commodities.⁵⁸ Changes of government in Batavia and The Hague, coupled with a worsening competitive position for Dutch rubber and a deepening revenue crisis in the NEI opened Dutch

55. Drabble, *Malayan Rubber*, 49-50.

56. Drabble, 50. “The daily rates of pay for Indian male workers dropped from the range 50-70 cents in 1929 to 26-47 cents in 1932... Chinese contract labor suffered an even greater decrease from the range of 70 cents-\$2 a day down to 40-65 cents. The number of Indian estate workers in the FMS and SS declined from 205,000 to 104,000 over the same period... [For planters] changes indicate salary cuts and redundancies with more expensive seniors replaced by less-experienced juniors... in place of three- or four-year contracts directors arbitrarily substituted month-to-month employment, lengthened tours of duty, second-class for first-class sea passages, shortened paid leave, etc.”

57. Whitford cited in Drabble, *Malayan Rubber*, 53-54.

58. Rooth, *British Protectionism and the International Economy*, 63; Martin, *The Meddlers*, 189. JH Thomas served as Secretary for the Colonies for four months between Lord Passfield and Cunliffe-Lister.

The International Rubber Regulation Agreement

officials to restriction.⁵⁹ By November 1931, secret negotiations commenced between Campbell and J.A. Calder of the British CO, John Hay and H. Eric Miller of the RGA, van der Waals, and two Dutch producer representatives.⁶⁰

At their first meeting, Campbell declared that the basis for any restriction was the “effective restriction of native rubber in the Netherlands East Indies... as in 1932 Asiatic production of rubber in the Netherlands East Indies and Malaya could supply all the world’s requirements at the present reduced rate of consumption.”⁶¹ Van der Waals concurred, noting that while the NEI government was opposed, the Dutch Minister for the Colonies would use his authority to impose restriction in the NEI. Discussions coalesced around a quota scheme with releases determined by an international committee with pluripotential powers.⁶² While Hay feared that the scheme protected inefficient producers and “might mean handing the industry over to the natives” over the long run, Campbell contended that “the scheme would stabilize the existing position.”⁶³ These meetings clarified the stakes: the survival of European estate rubber (and flows of profits from Asia to Europe) or a

59. Drabble, *Malayan Rubber*, 173. Dutch rubber suffered due to the devaluation of Sterling in 1931.

60. CO 825/12/2, “Rubber: General, Part 2”, J.A. Calder, “Note of an interview at the Dutch Colonial Office”, 24-11-31, 163-167, *NAUK*.

61. CO 825/12/2, “Notes of a Meeting in Sir John Campbell’s Rooms at the Colonial Office on the 3rd of December,” 119, *NAUK*.

62. CO 825/12/2, “Notes of a Meeting in Sir John Campbell’s Rooms at the Colonial Office on the 3rd of December” and “Notes of a Meeting in Sir John Campbell’s Rooms at the Colonial Office on the 4th of December”, 117-145, *NAUK*.

63. CO 825/12/2, “Notes of a Meeting in Sir John Campbell’s Rooms at the Colonial Office on the 3rd of December,” 125, *NAUK*.

smallholder industry at lower prices with savings passed over to American manufacturers.

Malaya was not convinced of the scheme's feasibility and felt ignored by the CO. Clementi lamented "that the Cabinet would like to force a rubber restriction scheme upon the Malayan Governments, and also the Dutch Colonial Office would like to force a scheme upon the NEI Government."⁶⁴ Clementi worried about the feasibility of the scheme in the NEI and its stimulation of new planting in Siam, Indo-China and South America. Though Malaya desperately needed a recovery in rubber prices, restriction could bring its own woes in the form of artificial unemployment among Indians and Chinese⁶⁵ and defaults by indebted smallholders compelled to tap at capacity.⁶⁶ Indeed, smallholders owed over \$125 million to Chettiar lenders and increases in price from restriction might not compensate for the amount restricted.⁶⁷

Eric Geddes of Dunlop advised Clementi that restriction would disrupt the industry's period of "loss and attrition",

64. FCO 141/16301, "Malay States: Rubber Restriction Scheme", No. 13, Letter from Clementi to Caldecott, 7-1-32, *NAUK*. Clementi drew from a letter from Cunliffe-Lister on 18 December 1931, noting Cabinet's approval of restriction and orders to negotiate with the Dutch. FCO 141/16301, No. 23, *NAUK*.

65. FCO 141/16301, No. 28, Personal Letter, Colonial Secretary Shelley to Clementi, 15-1-32, *NAUK*.

66. FCO 141/16301, No. 31, "Aide-Memoire: Meeting held at the Residency, Penang, to Discuss the question of the participation by Malaya in an international scheme of rubber restriction, 16-1-32, *NAUK*.

67. FCO 141/16301, No. 36, "Aide-Memoire: Consideration of a Rubber Restriction Scheme at a Conference of Residents and Federal Heads held at King's House, Kuala Lumpur, on 22nd January, 1932 at 11am", 22-1-32, *NAUK*. The Chettiars were a moneylending and banking community from Southern India.

The International Rubber Regulation Agreement

causing it to be “disorganized, operating inefficiently.”⁶⁸ Geddes seethed that restriction would nullify Dunlop’s effort to “develop areas of new rubber planted with the highest grade of material and in the most modern way... putting the least efficient estates on to the ‘dole’..”⁶⁹ Clementi was partial to this view, and was impressed by Dunlop’s 17,000 acre estate in Negri Sembilan, planted with bud-grafted material and introducing “factory methods and machinery far in advance of anything hitherto in use” in both rubber processing and health services for the labor force.⁷⁰

The “Heaven-born”⁷¹ in the MCS were also concerned about political strife if the administrations were to aid European plantation owners at the expense of Malay smallholders. A.F. Richards, Governor of British North Borneo, deprecated restriction as a tactic “purely to save the industry ... for the European producer as against the Asiatic smallholder.”⁷² Richards excoriated the “big agency firms” headed by lead negotiators Hay and Miller⁷³, who “in their anxiety to hold up the price and to keep their own innumerable commissions... made the production of rubber

68. FCO 141/16301, No. 33, Letter from Sir Eric Geddes to Clementi, 15-1-32, *NAUK*.

69. FCO 141/16301, No. 33, Letter from Sir Eric Geddes to Clementi, 15-1-32, *NAUK*.

70. FCO 141/16301, No. 20, Letter from Geddes to Clementi, 9-1-32. *NAUK*; *Ibid.*, No. 21, Clementi to Geddes, 12-1-32, *NAUK*.

71. British planters referred to MCS officials as “Heaven-born” in reference to their aloofness and aristocratic English heritage. Guy Hutchings, “Rubber Planting in Malaya, 1928-32; a Happy Return, 1934-38,” Cambridge University Library, Microfilm, Accessed at the National Archives of Singapore.

72. FCO 141/16301, No. 60, AF Richards to Clementi, 31-1-32, *NAUK*.

73. Miller was Director of Harrisons & Crosfield, an Agency House with extensive rubber holdings and management contracts with rubber companies.

expensive and overlooked the slow approach of the host of smallholders which was to overturn their elaborate edifice of overhead costs.”⁷⁴ According to Richards, the agency firms tempted the smallholder away from “his padi, his coconuts, and his fruit trees”, convincing him that “the high road to wealth was paved with rubber” by propping up prices artificially.⁷⁵ Richards argued to Clementi that no level of “scientific management” could deliver the efficiency of the smallholder and the “future of the industry may well be that Europeans will merely manage the collection and marketing of the produce of big areas of smallholdings.”⁷⁶

On the level of the Empire, the protectionists won a qualified victory at the 1932 Ottawa Conference, establishing the Imperial Preference tariff framework. Though the metropolitan state failed to impose its leadership on the Dominions, Cunliffe-Lister sought to use the Colonial Office to advance British industries. In a back-and-forth with Clementi, Cunliffe-Lister asserted that “it is impossible for the Colonial Empire to prosper if the export trade of the UK is being killed.”⁷⁷ For Cunliffe-Lister the interests of the Colonial Empire were tied up with the interests of the UK:

I do feel that it is only by the Colonial Empire acting as a single coherent unit in Defence of itself and the Mother Country that it will be possible for us to get through these difficult times. If individual dependencies stand aside and say that they are

74. FCO 141/16301, No. 60.

75. FCO 141/16301, No. 60.

76. FCO 141/16301, No. 60.

77. FCO 141/16233, “Japanese Competition in Colonial Markets”, Enclosure 1 - “Chapter 12: Japanese Competition” in Letter from Government House, Singapore, to Cunliffe-Lister, 5-5-34; Clementi to Cunliffe-Lister, 3-5-33; Letter from Cunliffe-Lister to Clementi, 24-3-33, *NAUK*.

The International Rubber Regulation Agreement

*able to defend their own interests and are not closely concerned with the interest of the rest of the Empire, irreparable damage may be done, to themselves as much as to the rest of the Empire.*⁷⁸

In 1933, as rubber prices hovered around 1.5 to 2d/lb., and Malayan producers clamored for restriction while officials in Malaya and the NEI remained opposed, Dutch Prime Minister, Dr. H. Colijn assumed the portfolio of the Minister for the Colonies.⁷⁹ Cunliffe-Lister wrote to Clementi in June that he was confident that Colijn could force the NEI to restrict “native” rubber.⁸⁰ Clementi had softened and was open to any scheme that the Dutch could implement but maintained that it would be “impossible for the Malayan administrations to adopt any policy which involved discrimination against the native producer and in favour of estate owners.”⁸¹

By this point, negotiators agreed on a quota scheme based on current capacities with the NEI restraining smallholders through an export duty that would be spent primarily on “social purposes (roads, markets, mosques, etc.) in the rubber area.”⁸² The RGA secured the participation of the French Union des Planteurs des Caoutchouc, with the proviso that Indo-China could export as much rub-

78. FCO 141/16233, Letter from Cunliffe-Lister to Clementi, 24-3-33, *NAUK*.

79. Drabble, *Malayan Rubber*, 175.

80. FCO 141/16240, No. 1, Secret Telegram from Cunliffe-Lister to Clementi, 16-6-33, *NAUK*.

81. FCO 141/16240, No. 7, Clementi to Cunliffe-Lister, 27-6-33, *NAUK*.

82. A Luytjens, “The Restriction Problem with regard to Native Rubber in the NEI,” 24-7-33 in FCO 141/16240, No. 28, Cunliffe-Lister to Clementi, 12-10-33, *NAUK*.

ber to France as demanded.⁸³ In mid-November, the RGA presented Cunliffe-Lister with a draft agreement with the IAROC and Union des Planteurs, oriented around “maintaining a fair and equitable price level that will be reasonably remunerative to efficient producers.”⁸⁴ The agreement included the Malayan Administrations, Ceylon, India (including Burma), the NEI, French Indo-China, North Borneo, Sarawak and Siam with committee representation apportioned according to the quotas assigned to each state.⁸⁵ Colijn promised the passage of restriction legislation in the NEI, going “over their heads by a Royal Decree” if needed.⁸⁶ Siamese assent was negotiated by Malayan agency house directors, Egmont-Hake of Harrisons & Crosfield and James Robertson of Guthrie & Co.⁸⁷

In April, the UK Government was prepared to sign the agreement.⁸⁸ The CO continued to direct Malayan policy, installing Campbell as a Malayan delegate so that he could chair the regulatory committee, as well as both Hay and Miller, given their position as Directors of Sterling rubber companies, leaving Caldecott with just one delegate to ap-

83. FCO 141/16240, No. 29, Cunliffe-Lister to Clementi, 19-10-33, Enclosure of a memo from WJ Gallagher, Chairman of the RGA with translated memo from the Union des Planteurs, *NAUK*.

84. FCO 141/16240, No. 35, Cunliffe-Lister to Clementi, 24-11-33, Draft agreement dated 16-11-33, *NAUK*.

85. FCO 141/16240, No. 35.

86. FCO 141/16240, No. 37, John Maffey, CO, to Caldecott, 15-2-34, *NAUK*.

87. FCO 141/16240, No. 38, Telegram, Cunliffe-Lister to Clementi, 16-3-34; No. 39, Telegram, Cunliffe-Lister to Clementi, 16-3-34, *NAUK*.

88. FCO 141/16240, No. 53, No. 55, Cunliffe-Lister to Caldecott, 13-4-34, *NAUK*.

The International Rubber Regulation Agreement

point.⁸⁹ The Malayan delegation would thus include only one Malayan official, V.A. Lowinger, while the remaining delegates would represent the interests of the UK (and the RGA). The International Rubber Regulation Agreement (IRRA) was signed on April 28th, 1934 encouraging speculators and boosting rubber prices, while sidelining Malayan and NEI officials, the reservations of producer-manufacturers like Dunlop, and the interests of smallholders across Southeast Asia.

SUBDUING THE SMALLHOLDER, THE CONSUMER, AND THE SPECULATOR: THE IRRA, 1934-38

The IRRA secured rubber regulation in the states and territories accounting for 97% of world exports, an effective monopoly over exports provided that the signatories could implement the decisions of the International Rubber Regulation Committee (IRRC). Between 1934 and 1938, signatory states - particularly the NEI - needed to develop administrative capacity to discipline smallholders, suppress smuggling, and manage the political fallout of export controls. The IRRC needed to balance rapid drawdowns of world rubber stocks with the emergence of substitutes like reclaimed and synthetic rubber, while promoting scientific advancement in rubber production. This required deepening the coalition of statesmen, shareholders, agency houses, colonial administrators, and planters behind the agreement. By the first meeting of the IRRC on May 8th,

89. FCO 141/16240, No. 67, Cunliffe-Lister to Caldecott, 13-4-34, *NAUK*. Caldecott served as Officer Administering the Government of the Straits Settlements following Clementi's retirement.

1934, the problem of the NEI smallholder threatened to scuttle the scheme.

While the committee could fix a standard for rubber stocks at three months' consumption and establish a framework of monthly release rates, discussions were derailed by the NEI's administrative problems. NEI delegate J. van Gelderen repeatedly raised the NEI's administrative troubles: "the question of the regulation of native rubber was not purely an internal matter... it had also an international aspect of considerable importance."⁹⁰ Ultimately, the IRRC agreed to a schedule of releases beginning at 100% for June, falling steadily to 70% for December in 1934. As these rates applied to production figures from 1929 to 1932, they missed the significant increase in smallholder output in Malaya (20%) and the NEI (61%) in 1933-34.⁹¹ The first meeting thus cemented a loss for smallholders and a headache for NEI officials. In September, NEI delegate D. Bolderhay proposed a buffer-stock scheme to *reduce* prices as the "essential contention of his Government was that the present price of rubber was too high."⁹² Bolderhey unsuccessfully sought a pivot-price of 4d/lb., worrying that speculation had pushed price expectations to 9d or even 1s, levels at which the NEI could not operate the scheme.⁹³

Bolderhay contended that the increase in price to 7d made the export tax scheme unworkable "as the money

90. FCO 141/16240, No. 90, Airmail from Under Secretary of CO to Chief Secretary of FMS, 11-5-34, "Minutes of the First Meeting of the International Rubber Regulation Committee on 8th May 1934," *NAUK*.

91. Drabble, *Malayan Rubber*, 283-4.

92. FCO 141/16253/2, No. 7-8, "Provisional Minutes of the 4th Meeting of the IRRC," 25-9-34, 4, *NAUK*.

93. FCO 141/16253/2, No. 7-8.

The International Rubber Regulation Agreement

must be used for the benefit of the natives themselves, and the amount of money collected from a high export tax would be so large that it would be impossible to spend it.”⁹⁴ Campbell noted that the levy already brought in £3 million a year, but argued that at lower prices any reduction in demand would devastate Malayan estates.⁹⁵ Lowinger worried that the entire agreement might fall apart.⁹⁶ By February 1935, Dutch insistence on higher releases caused French delegate Colonel Bernard to threaten Indochina’s withdrawal, as prevailing prices could not ensure the 10% profit expected of tropical ventures.⁹⁷ Dutch difficulties administering lower release rates meant stocks were projected to increase by 17,000 tons *after* two years of restriction.⁹⁸ In March, van Gelderen admitted that the Native quota had been exceeded by 8000 tons in 1934 and already exceeded the January to February quota by 5000 tons.⁹⁹

As US consumption sagged in 1935, the stock position worsened and shareholders in London criticized the IRRC.¹⁰⁰ In September, van Gelderen asked the committee to revise the NEI’s quota, noting that smallholders were

94. FCO 141/16253/2, No. 10, “Provisional Minutes of the 5th Meeting of the IRRC, 30-10-34, p. 32, *NAUK*.

95. FCO 141/16253/2, No. 10, 34, 40.

96. FCO 141/16240, No. 101, Chief Secretary, FMS to Caldecott, 31-10-34, *NAUK*.

97. FCO 141/16253/2, No. 13, “Provisional Minutes of the 9th Meeting of the IRRC, 26-2-35”, 7-16, *NAUK*.

98. FCO 141/16253/2, No. 13.

99. FCO 141/16253/1, No. 16, “Provisional Minutes of the 10th Meeting of the IRRC, 26-3-1935” *NAUK*.

100. FCO 141/16253/1, No. 24, Annex F, “Provisional Minutes of the 12th Meeting of the IRRC,” 24-9-35, *NAUK*. Resolution passed by the Rubber Shareholders Association criticizing the IRRC.

projected to export over twice as much rubber in 1935 as in 1932.¹⁰¹ Van Gelderen revealed that smallholders had exceeded their quota by 42,000 tons and were now *more* reliant on rubber incomes. Without an increase in their basic quota, the planned individual restriction program would leave smallholders destitute.¹⁰² Ultimately, the Committee increased the NEI quota by around 55,000 tons per year, with European estates sacrificing export rights to grant smallholders an annual increase of 85,000 tons.¹⁰³ At the same meeting, Ceylon and North Borneo's proposals for quota revisions were defeated by the Malayan and NEI delegates on the grounds that such revisions would be contrary to the IRRA. This event highlights the IRRC's internal hierarchy, in which UK delegates directed discussions and Dutch delegates gained concessions by virtue of the remarkable production of NEI smallholders.

Higher quotas gave the NEI some breathing space but they were forced to increase the export tax from 29 to 37 cents per kilo by September 1936 and following the devaluation of the Guilder, to 51 cents/kg.¹⁰⁴ In 1936, the export

101. FCO 141/16252/2, No. 27, Annex C, "Memorandum concerning the necessity of revising the basic quota allotted to the Netherlands East Indies, September 1935", in "Provisional Minutes of the 13th Meeting of the IRRC," 20-11-35, *NAUK*. Van Gelderen wrote that "It has been assumed in the years preceding restriction that the native producers could not compete at low prices, but it has now become evident that many producers had more lucrative employment at that time and consequently the production of rubber did not attract them."

102. FCO 141/16252/2, No. 27, Annex B, "Report on discussions between van Gelderen and Bolderhey; and Campbell and Hay regarding the Dutch request for a revision of the NEI basic quotas, and their recommendations to the IRRC, November 1935," *NAUK*.

103. FCO 141/16252/2, No. 27, Annex B.

104. Bauer, *The Rubber Industry*, 142.

duty fetched 47 million Guilders (amounting to 82 million Guilders since 1934) and the NEI began spending the funds on general expenditures.¹⁰⁵ During the export tax years, the NEI deputized European planters to conduct a tree census to determine individual assessments for smallholders. Bauer suggests that this system severely undercounted the number of trees (582,365,735 trees on 1,683,328 acres, owned by 788,473 smallholders) and wrongly classified acreage as “neglected,” leading to yield estimates far below actual production.¹⁰⁶ However, the implementation in 1937 of a coupon system for smallholders meant that overall production could finally be controlled and the NEI smallholder was finally brought to heel, achieving one of the primary goals of the IRRA and preventing the industry from being “handed over” to peasant-proprietors.

The second axis of conflict pitted producers against the Advisory Panel of consumer representatives. While the IRRC congratulated itself for being the first commodity control scheme featuring consumer representation, contradictions of interest proved insurmountable.¹⁰⁷ Two points of conflict were consumption expectations and the production costs of an “efficient” estate. In June 1934, George Beharrell of Dunlop and Otto Friedrich, the German representative, predicted record consumption in 1935 and Hay and Miller advocated for maximum possible stocks to match.¹⁰⁸ By October, the question of the ‘normal’ stock

105. Bauer, *The Rubber Industry*, 142-3.

106. Bauer, 143-5.

107. FCO 141/16253/2, No. 1, “Provisional Minutes of the 2nd Meeting of the IRRC,” 26-6-34, *NAUK*.

108. FCO 141/16253/2, No. 5-6a, “Provisional Minutes of the 3rd Meeting of the IRRC,” 31-7-34, *NAUK*.

position turned and Friedrich and American representative Townsend protested Campbell's intention to reduce stocks by 116,000 tons in the following year.¹⁰⁹ The Advisory Panel was aided by the Dutch delegation, who quickly agreed with the Panel's 80% proposal, even though it could cause a decline in prices, due to their administrative issues.¹¹⁰

By February 1935, as prices dipped under 6d/lb., Hay and Miller's enthusiasm turned to impatience and they strongly argued for steeper restriction.¹¹¹ Beharrell offered Dunlop's projection of consumption at 970,000 tons for the year and Townsend warned that US manufacturers were suspicious of the cartel arrangement and might lobby the US against it.¹¹² Accepting Dunlop's projections, and constrained by Dutch administrative problems, the Committee compromised, defeating public expectations of lower rates.¹¹³ This caused prices to fall by 1.25d/lb. and when the committee reconvened in March, Beharrell was firmly on the defensive.¹¹⁴ Hay derided the "rather imprudent and optimistic forecasts of consumption in 1935," demanding revisions that would allow the committee to defend more aggressive restriction rates.¹¹⁵ The British delegates were again cornered by the combination of the Advisory Panel

109. FCO 141/16253/2, No. 10, "Provisional Minutes of the 5th Meeting of the IRRRC," 30-10-34, *NAUK*.

110. FCO 141/16253/2, No. 10, 24.

111. FCO 141/16253/2, No. 13, "Provisional Minutes of the 9th Meeting of the IRRRC," 26-2-35, 5-6, 8, *NAUK*.

112. FCO 141/16253/2, No. 13, 21-3.

113. FCO 141/16253/2.

114. FCO 141/16253/1, No. 16, "Provisional Minutes of the 10th Meeting of the IRRRC," 26-3-35, 6-7. *NAUK*

115. FCO 141/16253/1, No. 16, 2.

and the Dutch delegation, who both required lower prices for different reasons.

In September, the Advisory Panel could no longer count on Dutch support, as “so far, all their prophecies had been wrong, from the point of view of the producers.”¹¹⁶ As consumer representatives could not vote, and the NEI was willing to try lower rates, the committee agreed to a 60% quota for the remainder of 1935. But this meeting raised the second point of conflict: estate costs of production. The RGA found that the bulk of Malayan and Dutch estates showed costs of 6.26 and 6.84d/lb. all-in, meaning that prevailing prices were unremunerative for most estates.¹¹⁷ These figures scandalized Townsend and Friedrich warned that “Germany had already solved the technical problem of producing synthetic rubber.”¹¹⁸ Campbell’s defense of the figures abandoned the principle of the “efficient” producer, as he suggested the committee should begin with the 5.03d producer and include higher-cost producers up to a sufficient number for world production (around 5.97d).¹¹⁹ With releases maintained at 60% through most of 1936 and American stocks declining significantly, Townsend and Friedrich attacked the committee’s ever rising level of “remunerative” prices.¹²⁰ The Advisory Panel worried about

116. Andrew MacFadyean in FCO 141/16253/1, No. 24, “Provisional Minutes of the 12th Meeting of the IRRC,” 24-9-35, *NAUK*.

117. FCO 141/16253/1, No. 24, Annex E: Cost of Production, 24-9-35, *NAUK*.

118. FCO 141/16253/1, No. 24, “Provisional Minutes of the 12th Meeting of the IRRC,” 24-9-35, *NAUK*.

119. FCO 141/16253/1, No. 24, 14.

120. FCO 141/16252/1, No. 35, “Provisional Minutes of the 18th Meeting of the IRRC,” 29-9-36, 19-20, *NAUK*.

the dwindling stock position, and Beharrell warned that imports by the US and Germany were “considerably in excess of the estimated quantity.”¹²¹ He contended forcefully that the role of the committee was to “at all costs avoid creating conditions which might cause a panic in the market.”¹²²

In early 1937, Beharrell was vindicated. Prices spiraled upwards due to an automobile and tire boom in the US as consumers sought new vehicles and replacement parts after years of depression. Bauer argues that the published 70% release rate for January-March 1937 encouraged a “share boom” as prices rose from 7.5d to 9.5d, guaranteeing profits to most rubber companies.¹²³ Stocks fell by 180,000 tons in 1936, to roughly 5.5 months of absorption, while consumption continued to increase. At an emergency meeting in December urged by the Advisory Panel, the producers refused to accept an 80% release for the first quarter of 1937 and their compromise of 75% caused a steep rise in prices to over 11d by New Year’s Day.¹²⁴ The Committee defended their decision, arguing that producers would be unable to meet higher rates of release at short notice.¹²⁵ The problem in both Malaya and the NEI was a labor shortage caused by a year of tight restriction and wages that had been depressed since the Slump.¹²⁶

121. FCO 141/16252/1, Annex C: Letter from Beharrell to Pawson, 20-11-36, in “Agenda and Statistical Annexes to 20th Meeting, 15-12-36” *NAUK*.

122. FCO 141/16252/1, “Provisional Minutes of the 19th Meeting of the IRRC,” 27-10-36, 12, 17, *NAUK*.

123. Bauer, *The Rubber Industry*, 125.

124. Bauer, 125.

125. CO 852/77/1, No. 1, Letter from AG Pawson to J van Gelderen, 1-1-37, *NAUK*.

126. CO 852/77/1, No. 4, Confidential telegram from Shenton Thomas (HC for Malay States) to Lowinger, 5-1-37; No. 13, Notes on Discussion with Professor Van Gelderen on 18-1-37, *NAUK*.

The International Rubber Regulation Agreement

In January 1937, American Ambassador R.W. Bingham questioned UK assurances that the scheme would not result in speculative rises in prices.¹²⁷ Bingham complained that the IRRC had caused “an increase in price considerably in excess of the objective set forth in the agreement itself and of the position taken by His Majesty’s Government,” and called on the UK to assure markets of adequate supplies.¹²⁸ The Foreign Office protested that the rubber supplies were limited by labor shortages, admitting that the scheme could draw down world stocks through tight restriction rates, but could not rapidly increase exports.¹²⁹ The Committee agreed to increase export rates at their next meeting in March, but were unable to reduce prices to a “reasonably remunerative level” and Bingham wrote to Anthony Eden that “the situation had been allowed to get sufficiently out of control.”¹³⁰ Bingham’s pointed question on the UK’s responsibility for the scheme forced Eden to protest that the IRRC was an “international body” and that UK delegates could not dictate policy (even though they held a majority and the chair).¹³¹

When the committee finally acceded to a 90% release for the second half of 1937, the US entered a recession that

127. CO 852/77/1, No. 16, “Record of conversation between Sir Robert Vansittart, the American Ambassador, and Mr. Atherton” in letter from Sir Robert Vansittart to Ormsby Gore, 25-1-37, *NAUK*.

128. Ray Atherton, USA Charge d’Affairs, to Lord Halifax, 15-2-37, enclosed in letter from Halifax to Sir R. Lindsay, 16-2-37, CO 852/77/1, No. 20, *NAUK*.

129. CO 852/77/1, No. 24, Letter from Anthony Gwatkin to RW Bingham, 11-3-37, *NAUK*.

130. CO 852/77/1, No. 31, Letter from Bingham to Anthony Eden, 1-5-37, *NAUK*.

131. CO 852/77/2, No. 60, Letter from Eden to Bingham, 20-8-37, *NAUK*.

caused a sharp collapse in rubber demand.¹³² In 1937, under the high rates of release approved by the IRRC, world exports reached a record of 1,166,000 tons while, by early 1938, absorption figures fell to 1932 levels.¹³³ Prices fell from 9d to 7d between September 1937 and the end of the year.¹³⁴ Between November and March, 1938, under pressure from speculators in London, the Committee reduced releases to 45% and hoped for industrial recovery in the US.¹³⁵ This drastic cut posed significant administrative challenges for Ceylon, which had issued coupons in excess of the permissible amount, expecting higher releases. This left Ceylon by September 1938 in a position in which all coupons for the year were exhausted and the government was forced to exceed allowances by 5%, which the Committee refused to accommodate as it had done for the NEI in 1935.¹³⁶

Ultimately, the experience of 1937-38 showed that the goal of price stability was incompatible with the inelasticity of demand for rubber, tied closely to the US economy. At the same time, it showed the ability of the IRRC to secure significant rises in rubber prices during a commodity boom, through the combined action of City speculators and regulators meeting in Brettenham House, two miles away. This period of regulation, particularly the Committee's laggardly revision of release rates in 1937, was excoriated by economists as evidence of the committee's produc-

132. Bauer, *The Rubber Industry*, 129.

133. Bauer, 129-30.

134. Bauer, 133.

135. CO 852/77/5, No. 75, Provisional Minutes of the 27th Meeting of the IRRC on 30-11-37, 13-14, *NAUK*. Bauer, *The Rubber Industry*, 133-4.

136. Bauer, *The Rubber Industry*, 134-5.

er-investor bias. Knorr and Bauer, later echoed by Drabble, also criticized the RGA and IRRC's estimations of costs as far above the costs of smallholders, who, as Campbell admitted, could supply the world market at lower prices.¹³⁷ Hay's assertion that "the estates must be maintained, as the world could not afford to rely solely on the native for its rubber" turned to ashes in the mouths of consumers and the US government.¹³⁸

CONCLUSION

In the interwar years, Britain steadily lost its position of financial hegemony. The financial exhaustion of the Great War struck an aging industrial power, already losing world markets to the US and Japan. Facing "illiberal" competition, the erstwhile liberal hegemon pursued imperial consolidation but ran into strict political and economic limits at the Imperial Conferences of 1930 and 1932. The Dominions would not accede to common Imperial subjecthood, to be shared with darker-skinned subjects in India and Africa, and neither they nor India could accept a trade regime that hampered their industrialization. The IRRA was a key effort to restore British hegemony in the 1930s. It was openly a metropolitan project to protect London's investments in rubber companies and flows of US Dollars from

137. Knorr, *World Rubber and Its Regulation*, 111; Bauer, *The Rubber Industry*, 204; Drabble, *Malayan Rubber*, 54; CO 825/12/2, "Notes of a Meeting in Sir John Campbell's Rooms at the Colonial Office on the 3rd of December," 119, *NAUK*.

138. FCO 141/16253/2, No. 13, "Provisional Minutes of the 9th Meeting of the IRRC, 26-2-35", 18, *NAUK*.

East to West, to stave off imperial collapse. The program of choice of the National and Conservative Governments was international commodity regulation, coordinated by the CO, while allowing the UK to hide behind “international” legal frameworks, privileging metropolitan states over colonial territories.

This evolution of imperial governance drew on older frameworks of state-corporate cooperation.¹³⁹ It was carried out by colonial states explicitly to discipline peasant-smallholders while shoring up European planters, Agency Houses, Sterling and Guilder company shareholders, and wealthy Asian estates. IRRC committee members tacitly conceded the circular logic of the “efficient producer,” ultimately essential for the defense of restriction rates that drove smallholders to rely more on export-coupon sales than on rubber production.¹⁴⁰

Surrounded by the intellectual milieu of “scientific management,” officials and producer-manufacturers in London and Malaya considered restriction a temporary solution that could not address the structural problems of rubber plantations.¹⁴¹ Furthermore, the mechanics of restriction ensured that production costs could only increase as estates could not replace their “wasting assets” with higher-yield material, and smallholders could not afford to take older trees out of production. Though this market inter-

139. F.W. Maitland, *Maitland: State, Trust, and Corporation*, David Runciman and Magnus Ryan, eds. (Cambridge: CUP, 2003); Stern, *The Company State*.

140. Knorr, *World Rubber and its Regulation*; Bauer, *The Rubber Industry*. Drabble, *Malayan Rubber*.

141. Ormsby-Gore, “Visit to Ceylon, Malaya, and Java”; FCO 141/16301, No. 18, 20, Letters from Geddes to Clementi, 6-1-32 and 9-1-32, *NAUK*.

The International Rubber Regulation Agreement

vention for the benefit of shareholders against smallholders troubled the “Heaven-born” cadre of the Malayan Civil Service, they were beset by mass unemployment, peasant indebtedness, and retrenchment in their own departments.

The IRRA was renewed in 1938 with important revisions, particularly regarding replanting, i.e., replacing aging rubber trees with high-yield clones. This change was driven by colonial states and producer-manufacturers, and accepted by shareholder groups, as the low yields and high costs of European rubber became a point of contention with the US in 1937. With the freedom to replant their estates and obtain new planting permission for experimental estates to develop higher-yielding material, it seemed that the renewed IRRA (1938-43) could place the rubber industry on a sound scientific footing. This would still benefit Europeans rather than Malay smallholders, but officials could defend themselves behind the smokescreen of progress and imperial security. In any case, the Japanese conquest of Southeast Asia in 1941-42 closed this chapter in the history of rubber, and the benefits would not be seen until the boom years of the Korean War. Ultimately, the IRRA allowed the British Empire a degree of breathing room, restarting the flow of rents from East to West, alleviating the UK’s “dollar exchange” problem, and reproducing empire in the Bay of Bengal.

PART III
COMMODITY STATUS(ES)

A National Commodity for whom? A Social History of Oranges in Early Republican Turkey

Semih Gökatalay

This study explores the development of the orange growing industry in early Republican Turkey from a socioeconomic perspective, by explicating people involved in the myriad aspects of the production, promotion, and consumption of this fruit. Although oranges remained an imported commodity in the 1920s, the Turkish government and private entrepreneurs took steps to cultivate them and become an orange-exporting country in the 1930s. They searched for ways to increase the quality of oranges and introduced trees from coastal Palestine with productive results. Various parts of Turkey soon produced tons of oranges. Oranges became one of the symbols of economically nationalist

policies as governmental authorities and businessmen promoted them as a 'national' export commodity. They waged a nationwide campaign to encourage both the production and consumption of oranges, especially during the Week of Domestic Goods, during which Turkish commodities were advertised in the press, schools, mosques, and other public spaces. The 1930s saw the nationalization of oranges in the public imagination of Turks. To this day, oranges have been perceived as a 'national' commodity in Turkey.

But how did the production of this 'national' commodity affect different social classes? Who benefited from the nationalization of oranges? In what ways did everyday people interact with this commodity? In its aim to provide a more nuanced explanation of these questions, this article focuses on the social history of orange growing and a broader understanding of the complex interconnections between producers, sellers, and consumers across space and time. It argues that, although oranges were propagated as a commodity for all citizens, regardless of their social class, a historical study of oranges reveals class differences in relation to the social effects of the orange growing industry. The details surrounding the production, promotion, and consumption of oranges, therefore, provide unique insights into broader socioeconomic changes during the transition to capitalism. Although the growth of orange production generated social conditions that could have potentially facilitated democratization, attitudes to oranges demonstrated class antagonism in Turkish society from the first stage of production to the last stage of consumption.¹

1. For the significance of democratization for commodity histories, see Bruce Robbins, "Commodity Histories," *PMLA* 120, no. 2 (2005): 454-463 at 456.

Oranges present a captivating case study of the historical development of commodities in Turkey. It was neither a primary commodity that all social classes uniformly consumed² nor an exotic fruit, such as avocado and pineapple. As a 'fresh' product, its preservation depended on the availability of cold storage. Oranges became a popular commodity that was available all year long, but the absence of modern refrigerators and the high cost of keeping oranges cold decreased their consumption, which had broad social implications. Orange growing became an increasingly lucrative business, but climatic and geographical conditions prevented oranges from turning into a history-changing commodity. Likewise, the state was neither omnipresent nor completely absent in the history of this product. Political elites played a crucial role in the consumption, promotion, and production of oranges, but did not monopolize its supply in the way they obtained control of other products, such as tobacco.

This study benefits from a set of primary sources to investigate the unique role of oranges. Archival sources, parliamentary debates, and the official gazette illustrate the state's attitudes and motivations. Nonetheless, these sources tend to overemphasize the role of the state and underemphasize market forces, such as increased demand and private companies selling seeds and fertilizers. I used another rich trove of sources, including newspapers, commercial magazines, novels, and memoirs, to correct any state-centric bias.

The next section deals with the complex nature of orange production in post-Ottoman Turkey. The emergence

2. I use Latham's definition of a primary commodity (A.J.H. Latham, *Rice: The Primary Commodity* (London: Routledge, 1998), 1).

of a national economy and policy instruments supporting production created the perfect environment for the expansion of orange growing and the establishment of a lasting connection between different provinces. Section 3 examines the creation of demand for oranges and their promotion as a national/Turkish commodity both at home and abroad. It shows the entanglement of oranges in Turkish culture and the political values that were attached to them. Section 4 explores the power relations and social aspects of orange consumption. It discusses the gap between the rhetorical strategy that was employed during its promotion as a national commodity and its limited consumption by lower classes.

PRODUCING A NATIONAL COMMODITY

The transition from the empire to the nation-state affected the production of oranges in the Republican era. Crete, Jaffa, and Tripoli were among the production centers that found customers both in the imperial capital and foreign markets. The largest-scale plantation in modern-day Turkey was in Dörtüol. Muslim immigrants from Chios, Crete, and Lesbos carried their knowledge of business and prior experience in orange production to Southwestern and Western Anatolia in the closing decades of the Empire.³ However, the series of wars, social upheaval, and political turmoil that engulfed most Ottoman provinces drove

3. *Portakal Kahramanı Balçovalı Mehmet Ali Amuca* (İzmir: C.H.P. İzmir Halkevi, 1937), 9-12; "Memleket Meseleleri," *Türk Sözü*, 10 June 1941, 2; Hamit Macit Seleker, *Yarımamızın Arkasından* (İstanbul: F. Bozkurt ve Ort Şti., 1960), 24.

down orange production. For example, Dörtyol produced approximately 100 million oranges in 1914, but the advent of World War I and the subsequent French invasion of the region reduced this amount to 28 million in 1923.⁴

Widespread appreciation for oranges in present-day Turkey arrived with the Republican era. Following the end of the Turkish War of Independence and the return of mobilized men to farms, agriculture entered a period of economic recovery in the mid-to-late 1920s. While a few thousand landlords had large-scale lands, the majority of peasants were small-scale farmers, with limited land to cultivate; thus, the prevalence of small-scale peasantry inhibited capitalist production.⁵ Capitalization in agricultural markets remained limited in the first years of the Republic.⁶ The Kemalists, the ruling cadre of the period, attached importance to the capitalization of agriculture.⁷ As a commodity that could take root easily in different provinces, oranges emerged as a popular commodity on the government's agenda. Most of the orange production centers of the Ottoman Empire were not part of the country after 1923, which made Turkey an importer of oranges from surrounding countries. Accordingly, the government introduced new laws to open up possibilities for growing oranges where it used to be marginal,

4. "Turkish Production of Lemons and Oranges," *Levant Trade Review*, December 1925, 516.

5. Yahya Sezai Tezel, *Cumhuriyet Döneminin İktisadi Tarihi (1923-1950)* (Ankara: Yurt Yayınevi, 1982), 343.

6. Korkut Boratav, *Türkiye İktisat Tarihi, 1908-2007* (Ankara: İmge Kitabevi, 2008), 53.

7. Ali Gevgilili, *Türkiye'de Kapitalizmin Gelişmesi ve Sosyal Sınıflar* (İstanbul: Bağlam, 1989), 46.

expand the area devoted to oranges, and encourage investment in orange production.⁸

The 1930s brought real changes in orange growing. This decade saw major structural changes in the Turkish economy.⁹ Agriculture was no exception. With a potentially declining customer base in the international arena and declining export prices, the global crisis hit hardest the agrarian economy of Turkey.¹⁰ The domestic terms of trade deteriorated significantly against agricultural products. The decrease in agricultural product prices and the rapid deterioration of the relative price structure limited the use of resources and resulted in less agricultural production.¹¹ Furthermore, the Kemalist leadership formulated urban-oriented economic policies, and rural areas were only of secondary importance in its agenda in the 1930s. The official expectation from farmers was the production of a surplus for the national accumulation of capital.¹²

8. *T.C. Resmî Gazetesi*, 21 February 1924; *T.C. Resmî Gazetesi*, 28 May 1927, 4.

9. Morris Singer, "The Economic Performance of the Turkish Republic," *Middle Eastern Studies* 20, no. 4 (1984): 155-165 at 156.

10. Şevket Pamuk, *Türkiye'nin 200 Yıllık İktisadi Tarihi: Büyüme, Kurumlar ve Bölüşüm* (Istanbul: Türkiye İş Bankası Kültür Yayınları, 2014), 186.

11. Çelik Aruoba, "Cumhuriyetin Kuruluş Yıllarında Türkiye'nin Tarımsal Yapısı ve Tarıma Yönelik Politikalar," in *Atatürk Dönemi Ekonomi Politikası ve Türkiye'nin Ekonomik Gelişmesi* (Ankara: A.Ü. S.B.F. Basım ve Yayın Yüksek Okulu Basımevi, 1982), 79-87 at 85.

12. Nadir Özbek, "Kemalist Rejim ve Popülizmin Sınırları: Büyük Buhran ve Buğday Alım Politikaları, 1932-1937," *Toplum ve Bilim* 96 (2003): 219-238 at 236. Despite state-industrialization, there was no significant shift from agricultural sectors to the urban economies until the end of World War II (Şevket Pamuk, "Agriculture and Economic Development in Turkey, 1870-2000," in *Agriculture and Economic Development in Europe since 1870*, eds. Pedro Lains and Vicente Pinilla (London: Routledge, 2013), 375-396 at 378).



*Fig. 1. Orange Production in Turkey*¹³

As part of this state-driven agricultural modernization, the government advocated the expansion of orange growing. Figure 1 demonstrates where Turkish farmers grew oranges most. There were climatic limits to the locations where orange growing could be practiced, so oranges were commonly grown in Southern and Southwestern Anatolia. Growing conditions for orange trees were so limiting that most other regions did not have significant amounts of trees. There were seven major places that cultivated oranges: Dörtyol (1), Adana and Mersin (2), Antalya (3), Muğla (4), Aydın (5), İzmir (6), and Rize (7). Only Dörtyol had a large-scale orange-tree plantation before the Repub-

13. I prepared the map based on the list given by *Portakallarımız* (Ankara: Ulusal Ekonomi ve Arttırma Kurumu, 1938), 7; “Portakallarımız,” *Yeni Mersin*, 28 April 1938, 2. I did not include modern-day Hatay since it was incorporated into Turkey only in 1939. However, even before its incorporation, the Turkish government and local officials sought to control the production and sale of oranges in this province (“Hatayda,” *Son Telgraf*, 2 January 1939, 3).

lic; oranges were a minor garden crop in the rest. Farmers in other areas started growing oranges commercially due to government-led initiatives. For example, local officials built orange orchards in Antalya.¹⁴ When orange growing was successful in Rize, the governor of Muğla spearheaded the transfer of saplings of easier-to-grow varieties from this province.¹⁵ Producers and government officials continued the expansion of the tree throughout the colored area in the following years (Figure 2).



Fig. 2. Orange Trees in Mersin (1936)¹⁶

14. *Halkevlerinin 1934 Senesi Faaliyet Raporları Hülasesi* (Ankara: Ulus Basımevi, 1935), 12.

15. "Rizenin Portakal ve Limon Fidanları," *Muğlada Halk*, 22 December 1930, 3.

16. Atatürk Library, Krt_017785.

In addition, the government took steps to improve orange growing. A committee of officials and producers discussed the future of the orange industry during the First Turkish Agricultural Congress in 1931.¹⁷ The government sent agricultural experts to provinces to work with farmers and monitor cultivation.¹⁸ A noteworthy advance was the distribution of thousands of saplings by the Ministry of Agriculture to provincial producers:¹⁹ Local officials investigated the suitability of the targeted areas for orange growing before handing over the saplings.²⁰ Under the sponsorship of the government, academics gave lectures to the public about cultivation methods in orange-growing towns and cities.²¹ Agricultural experts answered the questions of producers about orange growing in media outlets.²²

As the government encouraged the production of oranges through various channels, it sought to transfer knowledge from other countries, exemplified by Mandatory Palestine. The citrus industry began to develop in modern-day Israel in the nineteenth century:²³ Jaffa, in

17. Mustafa Yahya Metintaş and Mehmet Kayıran, “1929 Dünya Ekonomik Krizinin Türk Tarımına Etkileri ve 1931 Birinci Türkiye Ziraat Kongresi,” *Süleyman Demirel Üniversitesi Sosyal Bilimler Enstitüsü Dergisi* 23, no. 1 (1929): 33-82 at 53.

18. “Dörtüyl Portakallıklarını Tetkik Eden Heyet,” *Ulus Sesi*, 15 July 1938, 2.

19. “Narinciye Fidanı,” *Muğla’da Halk*, 15 January 1938, 1.

20. “Rize Narenciye Fidanlık Müdürlüğünden,” *Rize*, 23 January 1937, 7.

21. “Dörtüyl Portakalları,” *Muğlada Halk*, 18 February 1931, 2; “Türkiye Portakalcılığı,” *Yeni Mersin*, 2 March 1934, 1.

22. “Ziraat Bilgisi,” *Son Posta*, 10 May 1935, 7.

23. Mustafa Kabha and Nahum Karlinsky, *The Lost Orchard: The Palestinian-Arab Citrus Industry, 1850-1950* (Syracuse, NY: Syracuse University Press, 2021), 10.

particular, occupied a central place in the history of this commodity. Oranges from this province found customers elsewhere in the empire and in foreign markets.²⁴ Zionist colonization gave impetus to orange production, and oranges became a nationalist symbol of the Yishuv during British rule.²⁵ As another country in the Middle East that was known for the quality of its oranges, Palestine became a role model for Republican Turkey. The government sent agricultural experts and academics to Palestine to study modern methods there,²⁶ and purchased orange saplings from Palestine to grow them on home soil.²⁷ It employed Professor Friedrich Simon Bodenheimer, who was a German-born Jewish entomologist from the Hebrew University of Jerusalem, at the Ankara University for three years to teach new methods to fight against agricultural diseases.²⁸

One reason was weather conditions, such as rain fluctuations and freezing temperatures. For example, the lingering effects of drought in 1932 brought a run of poor harvests.²⁹

24. Haim Gerber, "Modernization in Nineteenth-century Palestine—the Role of Foreign Trade," *Middle Eastern Studies* 18, no. 3 (1982): 250-264 at 259-261.

25. Ayelet Kohn and Kobi Cohen-Hattab, "Tourism Posters in the Yishuv Era: Between Zionist Ideology and Commercial Language," *Journal of Israeli History* 34, no. 1 (2015): 69-91 at 74.

26. Turkish Republican Archives (BCA), 30.18.01.02.42.3.8, 21 January 1934, 1; BCA, 30.18.1.2.62.14.14, 21 February 1936, 1; BCA, 30.18.1.2.84.71.7, 30 July 1938, 1.

27. BCA, 30.18.1.2.79.83.4, 1 October 1937, 1. BCA, 30.18.1.2.75.42.20, 20 May 1937, 1.

28. BCA, 30.18.1.2.87.44.3, 18 May 1939, 1; "Turkey and Palestine," *The Palestine Post*, 23 October 1939, 6.

29. "Dörtüolda Belediye Biraz Gayret Göstermelidir," *Yeni Mersin*, 13 June 1933, 1.

A Social History of Oranges in Early Republican Turkey

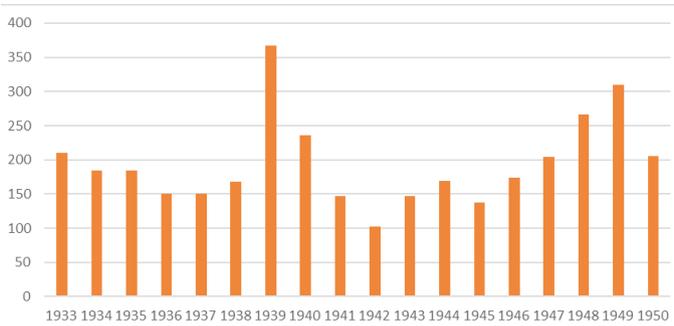


Fig. 3. Orange Production in Turkey, 1933-1950 (Million)³⁰

A more serious problem was heavy infestations that limited both yield and quality. The Ministry of Economy took measures against mites that fed on oranges.³¹ The government bought pesticides to spray orange trees to protect them from pests and imported tents to root out disastrous orange diseases.³² It disinfected and sterilized approximately half a million trees between 1930 and 1937. In addition, Turkish firms sold imported agrochemicals.³³ Newspapers explained to orange producers how to store

30. I prepared the graph based on the statistics given by Nadir Yurtoğlu, "Cumhuriyet Döneminde Türkiye'de Meyve Üretimi (1923-1950)," in *Türkiye'de Tarım Politikaları ve Ülke Ekonomisine Katkıları*, eds. Arzu Güvenç Saygın and Murat Saygın (Ankara: Atatürk Kültür, Dil ve Tarih Yüksek Kurumu, 2019), 547-562 at 555-556.

31. "Dörtüyl Portakallarındaki Hastalık," *Yeni Mersin*, 27 February 1931, 2; "Dörtüylde," *Türk Sözü*, 6 December 1935, 2.

32. "Portakal Hastalıkları," *Yeni Mersin*, 1 April 1934, 1; "Çadırılı Mücadele," *Yeni Mersin*, 27 May 1934, 1; "Çadır Usulü," *Yeni Mersin*, 18 November 1934, 1.

33. "Viktor Botros," *Yeni Mersin*, 14 July 1938, 4.

and handle agrochemicals.³⁴ All these efforts enhanced the yield, and 1939 marked the highest point of orange production in Turkey.

Oranges typically had to undergo a series of processes. The crop was ripe in December and January. Once fully orange, the fruit was ready to harvest. In 1925, a worker could pick 1,750 oranges and earn TL0.8 on average and a maximum of TL1 per day. After harvest, oranges could be stored at room temperature for about one week. Packing was an important part of the process: Workers, generally girls but also the elderly (Figure 4), labored in the warehouses with a daily income of TL0.2-0.3 per day.³⁵ The process of selling oranges moved through a series of steps that benefited the middlemen the most. Generally speaking, they were the ones who began to cash in on this fruit's popularity; such men sought to have a complete monopoly in the marketing of the product.³⁶

Producers materially benefited only to a limited extent from a crop of significant value because the intermediaries bought oranges at low prices. As a solution, they sought to form a company that would have branches in big cities.³⁷ With limited capital and capacity, they failed to initiate this undertaking. During the Great Depression, the government encouraged the formation of cooperatives to solve

34. "Portakal," *Yeni Mersin*, 27 June 1933, 2; "Portakallardaki Böcekler," *Yeni Mersin*, 30 June 1933, 3.

35. "Turkish Production of Lemons and Oranges," 516.

36. "Günün Tarihi," *Son Posta*, 4 February 1933, 2; "Şehir Haberleri," *Haber*, 24 January 1935, 3.

37. "Mersinde Bir Portakalcılık Şirketi Kuruluyor," *Yeni Mersin*, 17 December 1933, 1.



Fig. 4. Agricultural workers packing up oranges³⁸

the credit crisis in the countryside.³⁹ Under government supervision, orange producers founded cooperatives to provide credit and standardize production.⁴⁰ Nonetheless, the cooperatives did not put an end to the producers' problems. For example, a delegation of orange producers from Dörtöyol complained to the Ministry of Economy about the local orange cooperative in their town. They claimed that the cooperative monopolized the sale of oranges, restricted the number of oranges that could be sold, and went back on its promise to purchase all locally-produced oranges.⁴¹ These complaints resembled the inability of coffee cooper-

38. "Portakal Dağlarında," *Son Posta*, 18 April 1934, 6.

39. Cem Emrence, "Turkey in Economic Crisis (1927-1930): A Panoramic Vision," *Middle Eastern Studies* 39, no. 4 (2003): 67-80 at 70.

40. "Dörtöyolda Faydalı Bir Kurultu," *Türk Söz*, 6 October 1934, 1; "Portakal Satış Kooperatifi," *Rize*, 30 July 1938, 7; "Rize Portakal Kooperatifi," *Rize*, 20 August 1938, 1.

41. "Kooperatifi İstemiyorlar," *Son Telgraf*, 28 February 1939, 2.

atives in Costa Rica to respond to the needs of producers.⁴² As with their counterparts elsewhere in the developing world, Turkish producers could not mobilize opposition to the delivery and distribution of oranges, and the middlemen continued to receive the lion's share.

This weakness of producers was inextricably linked to state policies. As Giovanni Federico articulated it, agricultural cooperatives can bring certain advantages, such as credits with a low-interest rate, to their members. When the activities of cooperatives are not transparently monitored, however, they provide few benefits to their members.⁴³ The state empowered orange cooperatives to create local monopolies in early Republican Turkey, which clearly developed a feeling of unease among producers.

The increasing popularity of this fruit as a cash crop brought massive social changes, negative and positive, in orange-growing areas. As Sven Beckert et al. put it, commodity frontiers provide a better understanding of “the fundamental dynamics of capitalism and its connection to and subsumption of new spaces, new countrysides, and new forms of nature.”⁴⁴ The commodity frontiers of orange production in Turkey can be evaluated within the broader capitalization of agriculture in the early republican era. More and more peasants began to produce for the

42. For details, see Peter Luetchford, *Fair Trade and a Global Commodity: Coffee in Costa Rica* (London: Pluto Press, 2007), 31.

43. Giovanni Federico, *Feeding the World An Economic History of Agriculture, 1800-2000* (Princeton: Princeton University Press 2009), 133-136.

44. Sven Beckert, Ulbe Bosma, Mindi Schneider, and Eric Vanhaute, “Commodity Frontiers and the Transformation of the Global Countryside: a Research Agenda,” *Journal of Global History* 16, no. 3 (2021): 435-450 at 435, 437.

market in this period.⁴⁵ As with other popular commodities, the ongoing process of commercialization touched many orange-growing areas. For example, it provided TL5,000,000 to the annual income of the residents of the province of Adana only in 1932.⁴⁶

The fruit's influence was felt more intensely in smaller places; for example, orange orchards occupied only a small part of the cultivated area of Kadirli, a town in Adana, in the late Ottoman Empire. After the government embarked on a massive orange-planting program, oranges became the major commodity for six villages in the area: In 1943, the town produced 2,500,000 oranges, and peasants earned a profit of TL80,000 from their sale.⁴⁷ Another example was Finike, a town in Antalya province, which saw a surge of orange planting, producing eight and ten million oranges in 1937 and 1938, respectively. The plantation of 16,000 new orange trees pushed up output still further on average in this town in the following years.⁴⁸

By becoming a main source of income, oranges were thoroughly infiltrated into the local economies in villages and towns. This increased dependency on orange production still could have negative consequences, especially when a radical change in climate or a decrease in temperature occurred. Failed harvests were usually not fatal for

45. Bahattin Akşit, *Türkiyede Azgelişmiş Kapitalizm ve Köylere Girişi* (Ankara: Orta Doğu Teknik Üniversitesi Öğrenci Birliği Yayınları, 1967), 78.

46. "Memleket Haberleri," *Son Posta*, 11 January 1932, 4.

47. Abdullah Erdoğan, Kadirli Kazası Fiziki, Beşeri, İktisadi Tedkiki (Mezuniyet Tezi, Edebiyat Fakültesi Coğrafya Şubesi, Sömestr 7-6, 1943-1944), 38.

48. "Portakal Mahsulü," *Haber*, 20 January 1939, 10.

the livelihood of farmers, because most producers were smallholders who engaged in mixed-crop farming and cultivated more than one commodity. Nevertheless, the loss of income still adversely affected the well-being of producers. For example, producers in Aydın could not make any money from this commodity because of frost damage to orange trees in 1942, although the gross value of oranges produced in this province had been TL168,760 in the previous year.⁴⁹

THE PROMOTION OF ORANGES
AS A 'TURKISH' COMMODITY

The reason why oranges took on nationalist and symbolic meanings lies in the political spirit of that time. Economic nationalism, as a policy and idea, dated back to the late Ottoman Empire, when government authorities supported the growth of domestic industries and advocated the consumption of locally-produced commodities. The Great Depression and subsequent protectionist policies consolidated these efforts and led to government-backed nationwide campaigns in economic life. Within this increasingly nationalist climate, the Turkish government cemented oranges as a national commodity, giving this fruit a cultural and political foothold in the society it needed. The expansion in the range of local oranges and the dramatic increase in production was advertised as a sign of the success of economic nationalism.⁵⁰

49. T.C. Başvekâlet İstatistik Umum Müdürlüğü, *Meyve İstatistiği 1938-1942* (Ankara: Basım ve Ciltevi, 1944), 254.

50. Taha Toros, "Dört yolda Portakal Meselesi," *Adana Ticaret Gazetesi*, 1 January 1938, 1-2.

The role of the People's Houses (*Halkevleri*), which were founded by the government to spread Kemalist reforms among the populace, in the glorification of oranges as a fruit of the Turkish nation was particularly important. The Mersin People's House, for example, opened the first orange exhibition in the country to introduce this fruit to the masses in 1934.⁵¹ The People's House in Aydın organized an annual festival of oranges.⁵² The one in İzmir published a book in 1937, titled "The Orange Hero: Uncle Mehmet Ali from Balçova," on Mehmet Ali, who was a sixty-five-year-old orange producer from Balçova, İzmir. The leading figures from the People's House, together with Governor Fazlı Güleş, paid a visit to his house to hear his story of orange growing over the decades. There were two motivations behind their visit. First, the People's House portrayed him as a model of success for other potential orange growers. Second, the farmer credited the government and its officers in the province with helping him become quite successful in achieving cultivation, while the People's House propagated the government's role.⁵³ As oranges were a national commodity, Mehmet Ali represented the patriotic Turkish villager.

Kemalist intellectuals wanted Turkish citizens to support producers like him, who facilitated the production of local commodities. Media outlets were mobilized to spread out these messages. A slogan in *Rize* echoed this motivation: "Citizen! Don't forget to eat oranges every day during the orange season. And fill your pantry with orange

51. "Halkevinde Portakal Sergisi Açılacak," *Yeni Mersin*, 4 February 1934, 1.

52. "Akisler," *Aydın*, 8 April 1938, 2.

53. *Portakal Kahramanı Balçovalı Mehmet Ali Amuca*, 3-4, 14.

jam and syrup. Citizen! Turkish villagers grow the unique crops of our country for you. Eat them abundantly; let the villager smile.”⁵⁴ These efforts to create and propagate role-model citizens resembled other countries that associated consumerism with citizenship and national identity in the interwar era.⁵⁵ As reflected in the official propaganda, a ‘good’ citizen was the one who consumed national commodities, such as oranges.

The emergent vision of economic nationalism was grounded in the annual celebration of the Week of Domestic Goods (*Yerli Malları Haftası*) in December, which gave additional avenues for the promotion of orange as a national commodity. The week was publicized as the week of oranges, along with that of other ‘national’ commodities, such as figs, grapes, and hazelnuts. It was propagated that the consumption of these domestic commodities would increase the domestic demand for them.⁵⁶ The government recommended the consumption of oranges, instead of imported coffee and tea, in coffee houses and other public spaces during the week.⁵⁷ Upon the request of the government, preachers called on people in mosques to consume oranges.⁵⁸ The orange was so popular as a sign of economic nationalism that it made its way into theatre performances that were staged for children and adults alike during the week. For example, a children’s theatre play recommended

54. “Yurddaş,” *Rize*, 1 January 1938, 8.

55. For example, see Joe Perry, “Consumer Citizenship in the Interwar Era: Gender, Race, and the State in Global-Historical Perspective,” *Journal of Women’s History* 18, no. 4 (2006): 157-172 at 159.

56. “Yarın Hafta Başlıyor,” *Hâkimiyeti Milliye*, 11 December 1932, 1.

57. BCA, 490.1.0.0.14.76.2, 1936, 1.

58. BCA, 51.0.0.0.4.36.9, 20 December 1939, 1.

eating an orange every night in the winter, which would “rejuvenate the body and the mind.”⁵⁹

This campaign reinforced contemporary ideas of the orange not only as a national commodity but also as a healthy fruit that was rich in vitamins and minerals.⁶⁰ The Turkish press considered the consumption of oranges a mark of a good diet and explained its medical benefits to its readers.⁶¹ Oranges were advertised as a way of preventing chronic diseases and dealing with ailments and conditions.⁶² It was further labeled as a cornerstone of healthy eating practices. Newspapers were full of recipes for orange jam and marmalade syrup that citizens could make at home.⁶³ Health experts stated that every part of the orange, including its blossom and core, could be easily used.⁶⁴ Chefs began incorporating oranges in their recipes, such as duck breast with orange sauce, and praised them as “healthy” food. They gave instructions on how to use oranges in cooking

59. Münir Hayri Egeli, *Yeni Ağustos Böcekleri ile Karıncalar* (Ankara: Ulusal Ekonomi ve Arttırma Kurumu, 1936), 18. Political elites in this period put a specific emphasis on the health and well-being of younger generations for the future of the emergent nation-state. For details, see Yiğit Akın, “Gürbüz ve Yavuz Evlatlar”: *Erken Cumhuriyet’te Beden Terbiyesi ve Spor* (Istanbul: İletişim, 2004).

60. *Portakallarımız* (Ankara: Ulusal Ekonomi ve Arttırma Kurumu, 1938), 1-4. In this, Turkey closely resembled its counterparts in the Western World where freshness became synonymous with health. For details, see Susanne Freidberg, *Fresh: A Perishable History* (Cambridge, Ma.: Belknap Press, 2010), 6.

61. “Dirik ve Sağlık,” *Milliyet*, 19 November 1934, 4; “Hayat ve Sıhhat,” *Ulus*, 30 November 1937, 5; “Portakal,” *Haber*, 18 January 1938, 10; “Hayat ve Sıhhat,” *Ulus*, 23 October 1940, 4.

62. “Halk Doktoru,” *Yeni Sabah*, 22 March 1942, 3.

63. “Portakal Reçeli,” *Tan*, 26 October 1936, 9; “Kadınlar İçin,” *Haber*, 25 January 1941, 6.

64. “Sağlık Öğütleri,” *İkdam*, 19 April 1939, 7.

and how to consume such food through cookery books and newspaper food columns.⁶⁵

The promotion of oranges as a new, national commodity was not limited to Turkish provinces. Instead, the government sought to sell it to foreign countries and actually prioritized its export. High-level officials and ministers contacted their counterparts in Europe to lessen import restrictions against Turkish oranges.⁶⁶ Turkish orange sellers, however, still had to tackle a major problem: Turkish oranges were smaller and sourer than their counterparts in the global markets.⁶⁷ Moreover, the increase in production notwithstanding, Turkish oranges were still more expensive than those from other countries in the Mediterranean Basin, disincentivizing their import to countries in the region.⁶⁸

Turkey could export its oranges only to places where local orange production did not meet the demand. Its first major customer became the Soviet Union, with which Turkey had established a strategic friendship since the early 1920s. Turkey sent truckloads of oranges to the Soviet Union as early as 1930,⁶⁹ and Soviet demand continued

65. "Hayat ve Sıhhat," *Rize*, 23 December 1939, 3. One can draw parallels between the promotion of oranges in Turkey and that of milk in Sweden as a healthy and national commodity, especially for younger generations, in the interwar era. For details about the latter, see Carin Martini, "Swedish Milk, a Swedish Duty: Dairy Marketing in the 1920s and 1930s," *Rural History* 21, no. 2 (2010): 213-232.

66. Turkish Diplomatic Archives (TDA), 566/317-2407-60, 1 April 1926, 1; Toros, "Dörtüyolda Portakal Meselesi," 1-2.

67. "Exports of Turkish Oranges," *The Palestine Post*, 21 July 1938, 5.

68. Muhittin Birgen, "Portakal İhracatımız," *İktisadî Yürüyüş*, 15 March 1940, 4, 13.

69. TDA, 571/34801-137223-66, 10 August 1930, 1.

for the remainder of the decade.⁷⁰ The increasing demand from Germany for raw materials and primary commodities after the Nazis' seizure of power made Germany another important buyer of Turkish oranges.⁷¹ The fruit eventually made its way to other destinations, such as Romania and Switzerland,⁷² especially after the Civil War interrupted exports of Spanish oranges to international markets.⁷³ Civil authorities established regulations for the sale of oranges to foreign markets and attempted to standardize their export in 1940.⁷⁴

Yet, Turkey failed to penetrate export markets to the extent that political authorities and producers had anticipated.⁷⁵ This inability closely resembled that of Latin American countries that attempted to control the global markets of their major exports but failed to do so.⁷⁶ As the next section elaborates, the limited supply of oranges for foreign markets did not mean that Turkish citizens could enjoy this 'national' commodity. On the contrary, the ex-

70. TDA, 571/24760-107663-5, 1 May 1935, 1; "Alamanya ve Rusyaya Satılan Portakallarımız," *Urfada Yenilik*, 13 March 1936, 2.

71. "Portakal İşimiz," *Türk Sözü*, 19 September 1934, 3; "Piyasa Haberleri," *İkdam*, 28 January 1939, 6; "İktisadî Meseleler," *Son Telgraf*, 6 April 1939, 3.

72. "Şehir Haberleri," *Anadolu*, 30 May 1937, 2; "Dünkü İhracat," *Hakikat*, 15 December 1940, 2.

73. "Ekonomi," *Son Posta*, 28 February 1937, 8.

74. "Rize Portakal ve Balıkları," *Rize*, 28 January 1939, 2; *T.C. Resmî Gazete*, 14 December 1940, 177.

75. "Çukurovada Ziraî ve Ekonomik Durum," *Yeni Mersin*, 4 December 1936, 2.

76. For details, see John M. Talbot, "The Struggle for Control of a Commodity Chain: Instant Coffee from Latin America," *Latin American Research Review* 32, no. 2 (1997): 117-135.

portation of oranges was a formidable barrier to their domestic consumption.

THE CONSUMPTION OF ORANGES

The consumption of oranges varied geographically. It enjoyed moderate popularity where orange trees existed. For other areas, transportation facilities determined the availability of this commodity. Prior to the Republican era, oranges had limited regional and national markets. The Kemalists advocated the creation of physical infrastructure across the country, especially in the eastern provinces.⁷⁷ They created an efficient nationwide rail network to get goods from one place to another.⁷⁸ The railway system grew exponentially, reaching 7,900 kilometers by 1950. The second – and cheaper – form of transportation was steamships, each of which could carry 80-100 tons of oranges.⁷⁹ While the transfer of a train carriage full of oranges cost TL300, a steamship carried the same amount at a cost of TL80-90 in 1933.⁸⁰ Next year, the government reduced the price to TL175,⁸¹ but sea freight was still cheaper. Thanks to

77. Seyfi Yıldırım, “Cumhuriyet Dönemi Demiryollarının Gelişiminde Etkili Olan Faktörler,” in *Cumhuriyet Döneminde Demiryolları Sempozyumu*, ed. Mukaddes Arslan (Ankara: Atatürk Araştırma Merkezi, 2010), 93-100 at 95.

78. Şevket Pamuk, “Economic Growth and Institutional Change in Turkey before 1980,” in *Understanding the Process of Economic Change in Turkey: an Institutional Approach*, eds. Tamer Çetin and Feridun Yılmaz (New York: Nova Science Publisher’s, 2020), 15-30 at 23.

79. “Portakal Mahsulü,” 10.

80. “Günün Tarihi,” 2.

81. “Portakal Nakliye Ücretleri,” *Yeni Mersin*, 16 October 1934, 1.

the economic networking of the country, trains and ships carried commodities and supplied new markets with more fresh fruit. New connections were forged linking consumers and producers across space. Various types of oranges poured into distant markets.⁸²

Though these transportation facilities helped fuel demand by providing oranges to new provinces and locally-produced oranges spread out throughout the country, the practical problems of supplying oranges to remote provinces led to significant losses in the quality and quantity of oranges. In certain places where rivers were navigable, people shipped their oranges to nearby population centers.⁸³ Since river beds in orange-growing areas were uneven, however, navigation was generally impossible. Due to difficulties in transportation, oranges became rotten to the core.⁸⁴ Furthermore, primary accounts reveal that many of the oranges arrived in poor condition because orange crates were kept in airtight places or were heavily damaged during transportation.⁸⁵

All these factors adversely affected the availability of oranges and raised their prices in local markets. This was especially true for regions outside coastal areas and major cities. Since the bulk of the population lived in the countryside, most Turkish citizens had fewer opportunities to obtain high-quality and diverse oranges than their urban counterparts: It was hard to find oranges in good condition

82. "Mersin Portakalları," *Yeni Mersin*, 8 January 1934, 5.

83. Ganimet Sözübatmaz, *Ceyhan Monografyası* (İstanbul: İstanbul Üniversitesi Edebiyat Fakültesi Coğrafya Şubesi, Sömestr 7-8, 1943-1944), 13.

84. BCA, 30.18.1.2.84.71.7, 30 July 1938, 1.

85. "Şehir Haberleri," *Son Posta*, 28 December 1936, 4; "Doğru Değil mi?," *Haber*, 17 December 1937, 2.

at provincial grocery stores. With price levels even higher than in city centers, oranges in villages and towns were mostly consumed by local elites and civil servants; many ordinary folks did not eat oranges, simply because they could not afford to.⁸⁶

TYPES OF ORANGES IN İSTANBUL (JANUARY 1939)⁸⁷

TYPE	QUALITY	LOWER LIMIT (TL PER KILO)	UPPER LIMIT (TL PER KILO)
Dörtyol	36	2.5	2.6
Dörtyol	64	3	3.2
Dörtyol	80	2.25	2.3
Dörtyol	100	1.6	1.8
Dörtyol	150	1.55	1.75
Alanya	100	1.8	2.25
Alanya	80	2.5	2.8
Alanya	64	2.75	3
Fenike	160	4	4.3
Fenike	200	4	4.2
Fenike	96	4.5	4.7
Mersin Yafa	120	8	8.2

Oranges came in many sizes and shapes to the markets of big centers. The table lists the varieties of oranges in the central wholesale market hall in Istanbul, the most pop-

86. Muhtar Körükçü, *Köyden Haber* (Istanbul: Varlık Yayınevi, 1950), 39.

87. "İstanbul Merkez Hâli," *Münakaşa*, 6 January 1939, 2.

ulated city in Turkey. The first column shows the varieties of oranges, which were named after their geographical provenance. The second illustrates its quality, showing the maximum number of oranges packed in a single box. Type 64 was of the highest quality, while the bigger boxes were worse because their quality deteriorated markedly during transportation.⁸⁸ The retail price of oranges on sale at grocery stores was naturally higher, and prices changed from one location to another, with wealthy neighborhoods, such as Beyoğlu, having more expensive oranges. Likewise, the value of oranges was subject to considerable fluctuations due to the quality of the fruit. For example, a single high-quality orange reached the price of over 20 Kuruş (TLO.2) whereas the lowest type cost Kuruş 0.75 in Istanbul in 1939.⁸⁹ Customers could bargain if they purchased oranges from street peddlers.⁹⁰

In addition to geographical variations, consumption varied over time. Oranges were cheaper and more readily available in the winter. Still, even in the same season, prices changed very quickly. For example, flu outbreaks could boost demand for fresh oranges.⁹¹ In 1940, while oranges were cheap in late February, they became more expensive in early March.⁹² They became less available and more expensive in the summers. Preservation was poor, even in big cities, with most areas lacking refrigerated storage; a factor that diminished consumption of oranges before De-

88. "Portakal Sandıkları," *Yeni Mersin*, 24 March 1938, 2.

89. "Günün Meselesi," *Haber*, 4 February 1939, 3.

90. "Hergün Bir Yazı," *Milliyet*, 16 December 1933, 2; Aziz Nesin, *Gözünüz Aydın Efendim* (Istanbul: Nesin Yayınevi, 2011), 124-125.

91. "Portakal," *Son Posta*, 5 February 1932, 2.

92. Birgen, "Portakal İhracatımız," 4, 13.

ember and after February.⁹³ Literary accounts stereotyped - mostly in a negative way - eating an orange in the summer as being associated with the better-off;⁹⁴ the fact that an orange was a rare, tasty summer treat made it a status indicator and a fruit of the wealthy. For example, the taverns frequented by the lower classes chose not to offer oranges to their customers outside their seasons due to their high prices.⁹⁵ In a novel, Refik Halid Karay described a “rakish” and “wannabe” character who tried to impress sex workers by sending oranges in the summer.⁹⁶

A careful reading of contemporary sources, including press accounts, novels, and stories, suggests that high-quality oranges became a symbol of social status and the indulgence of the rich. For example, wealthy people who could afford to go to theatre halls ate oranges while watching plays.⁹⁷ Such people had a special fondness for the consumption of oranges on special occasions, such as religious feasts and New Year’s festivities.⁹⁸ Agop Arslanyan, an author of Armenian origin who was born in the province of Tokat in 1934, recalls in his memoirs that his father purchased oranges despite their high price when they went to a public bath.⁹⁹ A newspaper article

93. “Memleket Meseleleri,” 2.

94. Aka Gündüz, *Sansaros* (Istanbul: İnkilap Kitabevi, 1934), 17.

95. Mehmed Kemal, *Sürgün Alayı* (Istanbul: ABeCe, 1974), 36.

96. Refik Halid Karay, *Bu, Bizim Hayatımız* (Istanbul: İnkılâp, [1950] 2009), 237.

97. “Bir Müsabaka,” *Türk Tiyatrosu*, February 1938, 2.

98. “935 Yılı Yaklaşırken,” *Milliyet*, 27 December 1934, 5; “Günün Meselesi,” 3.

99. Agop Arslanyan, *Adım Agop, Memleketim Tokat: Tanıklık* (Istanbul: Aras, 2012), 58.

in Istanbul-based *İkdam* criticized extravagant people who were willing to pay five times the price for oranges in European-style pubs that catered primarily to the city's elites in Beyoğlu.¹⁰⁰

The characterization of commodities as a signal of one's social status was not limited to early Republican Turkey. Historians have demonstrated the social aspect of such commodities and explained how elites distinguished themselves from the rest of the society by consuming expensive items.¹⁰¹ Fresh products were not an exception.¹⁰² People from more humble backgrounds in post-Ottoman Turkey could eat a good-quality orange only if relatives who engaged in orange growing sent oranges to them privately.¹⁰³ If anything, all this affirmed that high-quality oranges were a luxurious symbol that could be found only at the tables of well-off households.

It is important to note that oranges had already been an expensive fruit before the Republican era.¹⁰⁴ The prices were so high in Ankara that even the leaders of the nationalist movement could not readily purchase oranges during the Turkish War of Independence.¹⁰⁵ In the Republican

100. "İşaretler," *İkdam*, 19 April 1939, 3.

101. For example, see Sidney W. Mintz, *Sweetness and Power: The Place of Sugar in Modern History* (New York: Viking, 1985), 83; Kevin Hetherington, *Capitalism's Eye: Cultural Spaces of the Commodity* (New York: Routledge, 2011), 109.

102. For a general discussion on "fruit as fashion," see Freidberg, *Fresh*, 126-129.

103. Gündüz, *Sansaros*, 17; "Doğru Değil mi?," 2.

104. Cevat Sami and Hüseyin Hüsnü, *İzmir 1905* (Izmir: İzmir Büyükşehir Belediyesi Kültür Yayını, 2000), 29.

105. Zeynel Lüle, *Mustafa Kemal'in Can Yoldaşı Ali Çavuş* (Istanbul: Doğan Kitap, 2008), 104.

era, despite the increased scope of production and significant improvements in transportation, oranges remained unavailable to the working classes. For example, the price of an average-quality orange in Istanbul in 1935 was TL 0.07.¹⁰⁶ In the same year, the salary of a janitor, a low-ranking civil servant, in the Directorate General of Foundations (*Evkaf Umum Müdürlüğü*) was TL8.¹⁰⁷ Assuming that he consumed only one orange per day, he would spend up to a fourth of his monthly income on this fruit. A medical doctor in the same institution, however, would need to spend only 3.5% of his salary (TL60) on the same number of oranges.

The major reason for high prices was exports, since the government prioritized foreign buyers and this drove up the price of oranges. Turkish citizens complained about export-driven high prices because high demand, domestic and foreign, and the limited amount of supply meant a price surge for local customers.¹⁰⁸ With foreign countries buying most of the high-quality Turkish orange production and the domestic demand growing, the price of oranges suffered frequent increases. For example, in 1935, as soon as German firms declared their interest in Turkish oranges, producers increased the price by 15 percent.¹⁰⁹ Even when there was a sizeable surplus after the exports were

106. "Şehir Haberleri," *Haber*, 24 January 1935, 3.

107. Minutes of the Grand National Assembly of Turkey (TBMM), 4 April 1935, 34-35.

108. "Memleket Haberleri," *Son Posta*, 11 January 1932, 4; "Portakallar Çürüyor," *Yeni Mersin*, 21 December 1933, 1; "Şehir Haberleri," *Haber*, 24 January 1935, 3; "Şehir Haberleri," *Son Posta*, 28 December 1936, 4; "Ekonomi," *Haber*, 10 December 1937, 7.

109. "Portakal," *Adana Ticaret Gazetesi*, 21 March 1935, 1.

completed, prices did not plummet because sellers did not want to sell their freshly grown and available oranges, but aimed to wait for higher prices on the national market.¹¹⁰ Although oranges became readily available throughout the four seasons by 1940, exports still increased prices in the local markets.¹¹¹ Therefore, oranges were an essential commodity in the creation and propagation of economic nationalism, but it was not affordable enough to be consumed by the nation as a whole. A columnist in *Haber* in 1937 criticized this:

In the propaganda by the National Savings Association, oranges are recommended to the public and their benefits are explained. Everyone knows the benefits and nastiness of oranges. Why is it necessary to spend so much money, hang pictures on the walls, and give advice to the public? First of all, we must make the fruit cheaper.¹¹²

CONCLUSION

Oranges became a solid part of the Turkish economy and culture soon after the promulgation of the Republic in 1923. It had long-standing associations with economic nationalism. Oranges would hold specific cultural meanings and spiritual significance in the decades to follow.¹¹³ The

110. "Portakal Fiatları," *Halkın Sesi*, 18 January 1936, 2; Hative Hatip, "Tacirin," *Açık Söz*, 18 March 1937, 3.

111. Birgen, "Portakal İhracatımız," 4, 13.

112. "Ekonomi," *Haber*, 10 December 1937, 7.

113. For example, see Ahmet Murat, *Kayıt Dışı Anılar - Anı* (Istanbul: Yapı Kredi Kültür Sanat, 2007), 205.

colors of the uniform and emblem of Adanaspor, one of the two biggest football clubs in Adana, are orange and white, with the former representing the orange fruit and the latter cotton, another popular commodity of this town. Likewise, the province of Antalya was so associated with oranges that its annual international film festival has been given the befitting name of “Golden Orange.”

The government played a decisive role in the encouragement of orange consumption and production. By combating diseases, minimizing insect damage, and crossbreeding Turkish oranges with foreign varieties, growers enabled oranges to ripen on a regular basis in areas where plantations had been marginal in the Ottoman Empire. This actualized the transformation of oranges from an import to an export commodity. In this, the nationalization of oranges in Turkey mirrored the disappearance of foreign oranges in the United States prior to World War I.¹¹⁴ As an undeveloped country, Turkey was able to put an end to dependence on its imported oranges in a very short period of time.

These developments, however, neither decreased the price of the fruit significantly nor opened up its consumption to lower classes. Regarding its sale, small producers could not reap the benefits of this profitable crop, while the middlemen derived enormous profits.¹¹⁵ Considering its consumption, the rich ate fragrant, juicy, and sweet-tasting

114. For details, see José Critz Morilla, Alan L. Olmstead, and Paul W. Rhode, “‘Horn of Plenty’: The Globalization of Mediterranean Horticulture and the Economic Development of Southern Europe, 1880-1930,” *Journal of Economic History* 59, no. 2 (1999): 316–52 at 319.

115. In the following years, the intermediaries continued to make enormous profits from the sale of oranges while the producers could not (Muzaffer Azazi, *Canlı Öyküler: Bir Çırpıda Okunacak Derslik Hikayeler* (Istanbul: Cinius, 2014), 46).

oranges, whereas poor-quality and bitter-fleshed oranges were relegated to the poor. All the evidence from various sources supports the conclusion that the well-off were far more likely than the lower classes to eat oranges year-round.¹¹⁶ Although improvements in transport links provided more people access to a greater variety of oranges, the fruit did not lose its social cachet. Instead, it continued to enjoy its status and often appeared as a cultural reference for wealth.

116. For example, see “Genç Kalemler Türkiye,” *Damla*, 15 December 1948, 41.

From Wild Game to Wildlife The Decommodification of American Hunting, 1890-1940

Drew Swanson

For more than two centuries, American wildlife served as classic commodities. Furs, feathers, and meat were valuable resources harvested on a substantial scale, traded for set values, and often shipped long distances.¹ The colonial trade ranged across the continent, from French *coureurs de bois* acquiring midwestern beaver pelts for transformation into fashionable outwear and hats, to Spanish traders buying deerskins by the pound in Pensacola on the Gulf Coast, later to be manufactured into gloves, book bindings,

1. This American trade was part of global trends of wildlife commodification. John F. Richards, *The World Hunt: An Environmental History of the Commodification of Animals* (Berkeley: University of California Press, 2014).

and saddles for the European market. Dead North American wildlife flowed out of forests, marshes, and lakes in a seemingly endless stream bound for global trade.²

The deerskin trade's astonishing volume illustrates the economic importance of this commerce. Native American hunters embraced the trade with enthusiasm, not least because it brought in exchange rum and firearms and ammunition, which allowed peoples engaged in the trade to extend their political and military sway over neighboring polities, radically unsettling the eighteenth-century American southeast in the process. By 1700, South Carolina merchants were exporting one hundred thousand deerskins a year, a number that increased to a quarter million in 1730. As late as the 1740s, the value of that state's deerskin exports "roughly equaled the combined total of indigo, beef and pork, lumber, and naval stores."³ Between 1700 and

2. Eric Jay Dolan, *Fur, Fortune, and Empire: The Epic History of the Fur Trade in America* (New York: W. W. Norton, 2010); Carolyn Podruchny, *Making the Voyageur World: Travelers and Traders in the North American Fur Trade* (Lincoln: University of Nebraska Press, 2006), chap. 7; Heather Lapham, *Hunting for Hides: Deerskins, Status, and Cultural Change in the Protohistoric Appalachians* (Tuscaloosa: University of Alabama Press, 2005); Shepard Krech III, *The Ecological Indian: Myth and History* (New York: W. W. Norton, 1999); Kathryn E. Holland Braund, *Deerskins and Duffels: The Creek Indian Trade with Anglo-America, 1685-1815* (Lincoln: University of Nebraska Press, 1993); Calvin Martin, *Keepers of the Game: Indian-Animal Relationships and the Fur Trade* (Berkeley: University of California Press, 1978)

3. Wilma A. Dunaway, "The Southern Fur Trade and the Incorporation of Southern Appalachia into the World Economy, 1690-1763," *Review* 17, 2 (Spring 1994): 225; Tom Hatley, *Dividing Paths: Cherokees and South Carolinians Through the Era of Revolution* (New York: Oxford University Press, 1993), quote on 70; Philip M. Brown, "Early Indian Trade in the Development of South Carolina: Politics, Economics, and Social Mobility during the Proprietary Period, 1670-1719," *South Carolina Historical Magazine* 76, 3 (July 1975): 124.

1775, the South Carolina and Virginia colonies alone exported approximately six and a half million deerskins, a total to which perhaps a million or more hides might be added to account for exports from other colonial ports.⁴ This deerskin trade was not a predecessor to or separate from the South's plantation economy, as is sometimes portrayed, but instead served as an economic complement to commodity agriculture for much of the colonial era. Deerskin profits fueled the purchase of slaves and plantation land in Virginia and the Carolinas, and involved such prominent planters as William Byrd, Gabriel Manigault, and Samuel Wragg.⁵

Commerce in wildlife continued past the colonial era, as other species besides beaver and deer proved of great economic importance at various times and places in the United States. Bison robes held tremendous value once Americans reached the Great Plains and began slaughtering the animals in volume in the nineteenth century.⁶ Plume hunters raided the heron and egret rookeries of Louisiana and south Florida, killing the birds for their showy feathers to adorn women's hats.⁷ And commerce in game meat grew exponentially in the nineteenth century as US cities blossomed and new transportation technologies made ship-

4. Drew Swanson, *Beyond the Mountains: Commodifying Appalachian Environments* (Athens: University of Georgia Press, 2018), 29.

5. W. Neil Franklin, "Virginia and the Cherokee Indian Trade, 1673-1752," *East Tennessee Historical Society Publications* 4 (Jan. 1932): 7-8; Brown, "Early Indian Trade," 118, 125, 127-128; Dunaway, "The Southern Fur Trade," 229-230.

6. Andrew C. Isenberg, *The Destruction of the Bison* (New York: Cambridge University Press, 2000).

7. Jennifer Price, *Flight Maps: Adventures with Nature in Modern America* (New York: Basic Books, 1999), chap 2.

ment faster and cheaper. Waterfowl, upland game birds, and venison were particularly popular in urban markets and restaurants. One Michigan conservationist estimated that, by 1880, three-quarters of all deer killed in Michigan went to out-of-state markets, while another sportsman lamented that along the Minnesota shore of Lake Superior, “millions of pounds of meat [were] left in the woods each fall by wasteful market hunters, who shipped out only the saddles, leaving the remainder to rot.”⁸

In all of these iterations, wildlife served as classic commodities, of the same type as timber, coal, and salt. Wild animals held well-established value, were shipped over long-distances, and proved to some extent fungible. A beaver robe of a certain quality was worth a fixed price in Great Britain, Indian traders priced buckskin by the pound, and a barrel of pigeons brought so much on the New York market. Like gold or petroleum, wildlife might be “mined,” followed by minimal processing (salting, tanning, etc.) to add value and stability to what began as a product of the earth.

Despite an economic prominence that lasted a full two centuries, American market hunting disappeared with astonishing rapidity in the years bracketing 1900. The reasons for the wildlife trade’s demise have been often explained, and are sketched below, but less well understood is the new form of commerce in game that took the place of market hunting. A new sporting ethic rejected the commodification of wild animals, but encouraged spending money on the chase, replacing one form of consumption

8. H. B. Boney, *The Destruction of Deer in 1880, and the Necessity of Prohibitory Export Laws* (Battle Creek: Michigan Sportsmen’s Association, 1881), 3-7; George Shiras III, “The Wild Life of Lake Superior, Past and Present,” *National Geographic Magazine* 40, 2 (Aug. 1921): quote on 129.

with another. This shift relied on cultural and political changes to eliminate the game trade's old economic and ethical foundations and erect a new, ultimately more lucrative, model in its place. By the mid-twentieth century, American hunters had become the resource, capping a rapid and dramatic decommodification of US wildlife. The case of American hunting offers one model of how ancillary, consumer-oriented activities could quickly replace or even surpass the economic importance of a substantial and long-standing commodity trade, given sufficient public and government will.

Because of this long extractive history, commerce in US wildlife faced exhaustion by the late nineteenth century. Some species had been hunted to near extinction. The vast bison herds were gone by the 1890s, the last passenger pigeon died in captivity in 1914, and beaver were but a shadow of their colonial-era populations. Even white-tailed deer, numbering perhaps thirty million in 1600, had dwindled to approximately 300,000 animals by 1900.⁹ The market trade in game seemed doomed by its own excess.

Campaigns to save the last of the wild game primarily came from sportsmen, who saw wildlife's commodity status as a grave threat to its survival: they believed circumscription of game markets was critical to ensuring hunt-

9. Errol Fuller, *The Passenger Pigeon* (Princeton, NJ: Princeton University Press, 2014), 112-119; Price, *Flight Maps*, 19-23; Thomas R. McCabe and Richard E. McCabe, "Recounting Whitetails Past," in *The Science of Overabundance: Deer Ecology and Population Management*, William J. McShea, H. Brian Underwood, and John H. Rappel, eds. (Washington, DC: Smithsonian Institution Press, 1997): 15. On the population nadir, see Robert L. Downing, "Success Story: White-Tailed Deer," in Harmon Kallman, et al., eds., *Restoring America's Wildlife, 1937-1987: The First 50 Years of the Federal Aid in Wildlife Restoration (Pittman-Robertson) Act* (Washington, DC: United States Fish and Wildlife Service, 1987), 45.



Fig. 1. Market hunting had taken a fearsome toll on American game species by the end of the nineteenth century. "Two Gunners in Kansas City," in William T. Hornaday, Our Vanishing Wildlife: Its Extermination and Preservation (New York: Charles Scribner's Sons, 1913), 61

ing's future.¹⁰ They launched multiple critiques of hunting for profit in an effort to define market hunting as not only economically unsustainable, but also morally repugnant. One tactic was to reify a new sporting ethic that placed em-

10. John Taliaferro, *Grinnell: America's Environmental Pioneer and His Restless Drive to Save the West* (New York: Liveright, 2019); Gregory J. Dehler, *The Most Defiant Devil: William Temple Hornaday and His Controversial Crusade to Save American Wildlife* (Charlottesville: University of Virginia Press, 2013); Douglas Brinkley, *The Wilderness Warrior: Theodore Roosevelt and the Crusade for America* (New York: Harper Collins, 2009); Michael Punke, *Last Stand: George Bird Grinnell, the Battle to Save the Buffalo, and the Birth of the New West* (New York: Smithsonian Books, 2007); Thomas L. Alther, "The American Hunter-Naturalist and the Development of the Code of Sportsmanship," *Journal of Sport History* 5, 1 (Spring 1978): 7-22; John F. Reiger, *American Sportsmen and the Origins of Conservation* (New York: Winchester Press, 1975).

phasis on the idea of fair chase. New technologies seemed particularly unsporting, as large bore “punt” guns felled waterfowl by the score on bays and lakes, high-powered rifles extended the range at which hide hunters could kill big game, and repeating shotguns promised to make market birders more efficiently deadly.¹¹ Combined with improving communication technologies that spread word of the locations of flocks and herds and increasingly efficient railroads that could speed game to distant markets, these firearms might sound the death knell of many imperiled game species. Only an emphasis on self-restraint could thwart this technological storm.

This restraint was the epitome of civilized masculinity, many sportsmen argued, and they drew on gendered language to further differentiate proper from vulgar forms of the hunt. Only fair chase was suitably manly: market hunting was crass commercialism of the same stripe that underlay office and wage work. By imposing self-restraint, sportsmen ironically argued, they could restore the virtues of more primitive men to the modern age.¹² The pursuit

11. William T. Hornaday, *Our Vanishing Wild Life, Its Extermination and Preservation* (New York: Charles Scribner's Sons, 1913), chap. 15; George O. Shields, *Prohibit Unfair Weapons: A Plea That the Use of Automatic and Repeating Shot Guns be Prohibited in Hunting Birds* (1911; New York: Shields' Magazine[?], 1906), *Hunting and Fishing; a Collection of Pamphlets*, Microfilm call no. Z MYO p.v. 4, no. 10, reel 5, New York Public Library, New York.

12. Tara Kathleen Kelly, *The Hunter Elite: Manly Sport, Hunting Narratives, and American Conservation, 1880-1925* (Lawrence: University Press of Kansas, 2018); Andrea L. Smalley, “‘Our Lady Sportsmen’: Gender, Class, and Conservation in Sport Hunting Magazines, 1873-1920,” *Journal of the Gilded Age and Progressive Era* 4, 4 (Oct. 2005): 355-380; William Cronon, “The Trouble with Wilderness; or, Getting Back to the Wrong Nature,” in *Uncommon Ground: Rethinking the Human Place in Nature*, William Cronon, ed. (New York: W. W. Norton, 1995): 78.

itself thus mattered more than the sustenance or profit it provided. Theodore Roosevelt is the classic example of the rhetoric of masculinity imbuing these critiques, but outdoorsman Townsend Whelen put it bluntest, worrying, “commercialism and life in cities robbed our young men of most of their primitive virtues.”¹³ Only fair chase could save them, he elaborated, since “big game hunting is a MAN’S GAME. It demands a MAN’S SINEWS.”¹⁴

Rejecting hunting for profit was thus apiece with sportsmen’s arguments for the curative power of the chase. In the woods lay escape from the nervous exhaustion of modern life. Horace Kephart, a librarian who suffered a nervous breakdown, lost his job, and fled to the Appalachian Mountains, detailed the problem. City life had a “malignant effect on physique,” increased the likelihood of a “nervous breakdown,” and could even produce “insanity.”¹⁵ The woods and sport hunting, however, were revitalizing, since a man “yearns for the thrill of the chase, for the keen-eyed silent stalking.” Outdoor sport substituted “nature’s healing for the city blight,” but that healing was reserved for ethical sportsmen and not market hunters, who reduced nature’s value to dollars and cents.¹⁶

Worth noting is that arguments against hunting as an economic and subsistence activity tended to target disad-

13. Townsend Whelen, *The American Rifle: A Treatise, a Text Book, and a Book of Practical Instruction in the Use of the Rifle* (New York: Century, 1918), vii.

14. Townsend Whelen, *Big Game Hunting* (Denver, CO: Outdoor Life Publishing, 1923), 1.

15. Horace Kephart, Journal 16, pp. 1a-1a1, MSS80-24, Hunter Library, Western Carolina University, Cullowhee, North Carolina (hereafter WCU).

16. Kephart, Journal 16, second quote on 1g; Horace Kephart, *Camping and Woodcraft: A Handbook for Vacation Campers and the Travelers in the Wilderness*, Vol. 1: Camping (New York: Outing, 1916), first quote on 17.

vantaged human populations. Crafting a sporting ethic that condemned the sale of game and, to a lesser extent, hunting to take the hungry edge off poverty meant labeling “good” and “bad” hunters as well as methods. If the highest forms of hunting showed manly restraint, then market and pot hunting must be uncivilized, their practitioners unworthy of the privileges of the woods. Across the southern states, bag limits, closed seasons, and proscriptions on game sales disproportionately targeted African Americans, making more difficult subsistence activities that had assisted life outside of the wage-labor economy. “Pot hunter” became an epithet largely synonymous with the black woodsman.¹⁷ Native Americans faced similar condemnation of their traditional hunting rights, as western landscapes increasingly fell under federal ownership and conservation regimes. And in the North, laws like those banning songbird hunting were often aimed at recent immigrants, casting their hunting practices as less “civilized” than other forms of the sport.¹⁸ William Hornaday, for example, portrayed “Italian laborers” as destroyers of song bird populations, and firearms-industrialist Matthew Browning blamed game

17. Jack Temple Kirby, *Mockingbird Song: Ecological Landscapes of the South* (Chapel Hill: University of North Carolina Press, 2006), 178-180; Scott E. Giltner, *Hunting and Fishing in the New South: Black Labor and White Leisure after the Civil War* (Baltimore, MD: Johns Hopkins University Press, 2008), chap. 5; Steven Hahn, “Hunting, Fishing, and Foraging: Common Rights and Class Relations in the Postbellum South,” *Radical History Review* 26 (Oct. 1982): 37-64.

18. Karl Jacoby, *Crimes against Nature: Squatters, Poachers, Thieves, and Hidden History of American Conservation* (Berkeley: University of California Press, 2001); Mark David Spence, *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks* (New York: Oxford University Press, 1999), chap. 6; Louis S. Warren, *The Hunter's Game: Poachers and Conservationists in Twentieth-Century America* (New Haven: Yale University Press, 1997)

destruction on “the cheap gun that goes into the hands of the boy, and of the negro, and of the foreign laborer.”¹⁹ In the eyes of many elite sportsmen, value judgements of hunting practices were a natural expression of the hierarchy of humanity.²⁰

This sociocultural work set a foundation for eliminating game’s commodity status, but it required legislation to fully close the trade. States moved to circumscribe and then eliminate market hunting in conjunction with sportsmen’s conservation campaigns, and often as the product of organized hunter lobbying efforts. The first steps typically focused on individual species that seemed particularly imperiled, with deer attracting the most legislation, perhaps because of the species’s obvious economic importance and rapid population decline in the late nineteenth century. For example, Maine, Michigan, and several other states passed laws in the late 1800s forbidding the sale of venison beyond their borders, though permitted internal traffic in deer under certain circumstances.²¹

19. William T. Hornaday, “A Talk with the Automatic Gun,” *Shields’ Magazine* 2, 1 (January 1906): 65; Browning, in *Automatic Shotgun*, Testimony before the Committee on the Territories, House of Representatives (Washington, DC: GPO, 1906), quote on 28.

20. Allen Garland, “Culling the Herd’: Eugenics and the Conservation Movement in the United States,” *Journal of the History of Biology* 46, 1 (Feb. 2013): 31-72; Gray Brechin, “Conserving the Race: Natural Aristocracies, Eugenics and the U.S. Conservation Movement,” *Antipode* 28, 3 (July 1996): 229-245.

21. Chester F. Banasiak, *Deer in Maine*, Game Division Bulletin No. 6, revised (Augusta: Maine Department of Inland Fisheries and Game, 1964), 10-11; Eugene T. Petersen, *Conservation of Michigan’s Natural Resources*, John M. Munson Michigan History Fund Pamphlet Number 3 (Lansing: Michigan Historical Commission, 1960), 10. Details of various turn-of-the-century state game laws can be found in T. S. Palmer and Henry Oldys, *Digest of Game Laws for 1901*, USDA Division of Biological Survey Bulletin No. 16 (Washington, DC: GPO, 1901).

Partial closures of the hunt also set precedent. Closed seasons and bag limits established that states might further restrict the taking of game. Remaining with the example of deer, states from Maine to California implemented limited deer hunting seasons and bag limits before the Civil War.²² And sex-specific hunting laws also began to regulate the market. As herd numbers fell, “buck laws” appeared, which forbade the killing of does and juvenile males in an effort to maintain reproductive stock. The perfect fusion of restraint and masculine pride, the cultural and legal emphasis on buck hunting celebrated mature male deer as the epitome of challenging hunting, and portrayed a willingness to kill other deer as effeminate and cowardly. Noted conservationists like Hornaday picked up the cause: he made buck laws part of his 1908 “Sportsman’s Platform,” a code of hunting ethics adopted by a number of prominent sportsmen’s clubs. Buck seasons came to Vermont in 1896, Texas in 1903, Pennsylvania in 1907, New Jersey in 1908, and Wisconsin in 1915; seventeen states in total by 1917.²³

22. Deer Research Project, *An Assessment of Deer Hunting in New Jersey* (Trenton: New Jersey Bureau of Wildlife Management, 1977), 6; Don C. Stanton, *A History of White-Tailed Deer in Maine*, Game Division Bulletin No. 8 (Augusta, ME: Department of Inland Fisheries and Game, 1963), 29; Henry Chase, *Game Protection and Propagation in America* (Philadelphia, PA: J. B. Lippincott Company, 1913), 42.

23. William T. Hornaday, “Ethics in Hunting Game,” *Forum* 57 (Jan. 1917): 105-107; Thomas, “The History of Deer in Vermont,” 416; Henry E. Clepper, *The Deer Problem in the Forests of Pennsylvania*, Bulletin 50 (Harrisburg, PA: Department of Forests and Waters, 1931), 5-6; Deer Research Project, *An Assessment of Deer*, 6; Ernest Swift, *A History of Wisconsin Deer* (Madison: Wisconsin Conservation Department, 1946), 29-31; Aldo Leopold, “Deer Irruptions,” *Transactions of the Wisconsin Academy of Sciences, Arts and Letters* 35 (1943): 355; Henry C. Hahn, Jr., *The White-Tailed Deer in the Edwards Plateau Region of Texas* (Austin: Texas Game, Fish and Oyster Commission, 1945), 9.

States occasionally circumscribed technology, too. A few states and individual counties banned the use of semi-automatic shotguns as they became available, for example, under the premise that the technology made the destruction of gamebirds by greedy hunters more likely.²⁴

State laws restricted market hunting, but Federal intervention dealt the crushing blow, with no piece of legislation more important in this regard than the Lacey Act (1900). Sponsored by Iowa congressman and sportsman John F. Lacey, the Lacey Act forbade the interstate transportation of game “killed in violation of state laws.” The convoluted phrasing came about because the federal government lacked power to regulate state game laws, but did have Constitutional authority over interstate commerce. Although the Lacey Act did not completely end market hunting—enforcement was always a challenge, and the sale of game still took place within many states—it did curtail the biggest operators and most lucrative markets.²⁵ Combined with tightening state legislation, the act signaled the end of wildlife as an American commodity.

Sportsmen and legislators found allies in sporting goods manufacturers. This might seem counterintuitive, since many conservation initiatives emphasized reduced hunting, at least temporarily. But the majority of manu-

24. Harry Bailey, “First Blood for Mississippi,” *Shields’ Magazine* 1, 8 (November 1905): 435; Joseph Kalbfus, ed., *Commonwealth of Pennsylvania Digest of the Game, Fish and Forestry Laws* (Harrisburg, PA, C. E. Aughinbaugh, 1911), 29; *Fish and Game Laws of New Jersey* (Trenton, NJ: Board of Fish and Game Commissioners, 1913), 52.

25. Thomas R. Dunlap, *Saving America’s Wildlife* (Princeton, NJ: Princeton University Press, 1988), 14-37; Reiger, *American Sportsmen*, 43, 65-66, 131-132; Theodore Whaley Cart, “The Struggle for Wildlife Protection in the United States, 1870-1900: Events Leading to the Lacey Act,” Ph.D. diss, University of North Carolina at Chapel Hill, 1971.

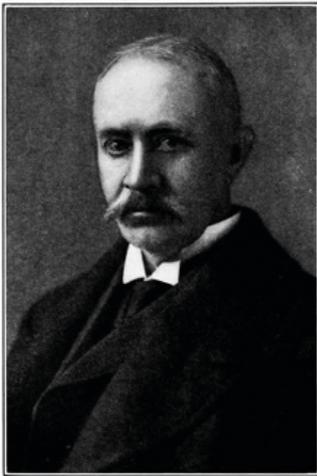
facturers supported conservation measures—either fully or partially—from an awareness that such a stance was good public relations and from simple calculation. Future sales of firearms and ammunition relied on game left to hunt. Recreational hunting promised more hunters afield yet smaller kills; a good business formula in the long run. As a consequence, various industry-funded conservation organizations emerged, such as the American Game Protective and Propagation Association (AGPPA) and the Clinton Game School, and the industry’s largest cooperative body, the Sporting Arms and Ammunition Manufacturers’ Institute (SAAMI), also supported conservation research. If manufacturers were sometimes lukewarm on certain proscriptions, they rarely organized outright opposition to hunting regulations.²⁶

Businessmen, wildlife managers, and elite sportsmen were in general agreement that market hunting should end, but they still sought economic incentives in the new regulatory and social regimes. Part of ensuring that the sporting ethic would take hold was finding alternative paths to profitability in hunting, keeping important participants invested in the transition. One approach envisioned “wildness” as a product of the mode of production, arguing that game might still be marketed if it came from farms rather than the field. This “game farming” movement gained traction in the United States in the early twentieth century. In this model, farmed game might produce tax revenue for

26. “For Game, or Gain?,” *Western Field* 18, 5 (Mar. 1912): 338-340; Aldo Leopold, *Report on a Game Survey of the North Central States* (Madison, WI: Sporting Arms and Ammunition Manufacturer’s Institute, 1931); Paul Tillett, *Doe Day: The Antlerless Deer Controversy in New Jersey* (New Brunswick, NJ: Rutgers University Press, 1963), 17-18; Leonard Lee Rue III, *The Deer of North America* (New York: Crown, 1979), 415, 418-419.

the state, provide landowners profit, and furnish the seed stock for replenishing wild populations, which would benefit both sportsmen and gear manufacturers. The only party absent from the equation was the market hunter, treated as no longer worthy of serious consideration after the critiques of the sporting ethic.²⁷

The most important advocate for game farming was magazine editor Dwight Williams Huntington, who headed *The Amateur Sportsman* (1908-1912) and, starting in 1912, *The Game Breeder*. Huntington coined the campaign's "More Game" name, envisioning game farms as key to restoring North America's wildlife populations. In his vision,



Dwight W. Huntington

Fig. 2. Dwight W. Huntington spearheaded a "more game" movement that hoped to replace market hunting with game farming and state wildlife propagation efforts. Frontispiece in Dwight W. Huntington, Our Wild Fowl and Waders (New York: Amateur Sportsman Co., 1910)

27. Drew Swanson, "Growing Wild: Visions of Wildlife Management as Agricultural Science in American Forests and Fields," *Agricultural History* 97, 2 (May 2023): 177-214.

farmed game would provide a crop for small farmers, supply the demands of consumers, and aid wild species by reducing hunting pressure.²⁸ Like hunting legislation, game farming attracted business interests. Firearms and ammunition manufacturers backed Huntington's campaign, often with funding. The aforementioned AGPPA paid to print game-farming guides, as did SAAMI and gunpowder companies like Hercules.²⁹

Real institutional brawn came with the creation of state game farms and support from the United States Department of Agriculture (USDA), which quickly embraced game farming as a worthy subject. Under the leadership of C. Hart Merriam, the USDA's Biological Survey branch led game-farming research for three decades, although other agency offices also participated in research and its dissemination. Fur production, deer, and gamebirds dominated the USDA agenda, in part because each research line tapped into long-standing wildlife markets. The agency issued numerous farmers' bulletins and other extension documents touting game farming's profit potential and explaining husbandry and marketing techniques.³⁰ The USDA also operated facilities devoted to game farming in-

28. Dwight W. Huntington, "The Editor's Page," *Amateur Sportsman* 40, 2 (Dec. 1908): 8-9.

29. "For Game, or Gain?," 338-340; Leopold, *Report on a Game Survey*; Davis Dyer and David B. Sicilia, *Laborers of a Modern Hercules: The Evolution of a Chemical Company* (Boston, MA: Harvard Business School Press, 1990), 41-64.

30. For example, Frank G. Ashbrook, *Mink Raising*, Bureau of Biological Survey Leaflet No. 8 (Washington, DC: GPO, 1927); David E. Lantz, *Raising Deer and Other Large Game Animals in the United States*, USDA Biological Survey—Bulletin No. 36 (Washington, DC: GPO 1910); Henry Oldys, *Pheasant Raising in the United States*, USDA Farmers' Bulletin No. 390 (Washington, DC: GPO, 1910).

vestigations, like a substantial fur research station in Saratoga Springs, New York.³¹

Although private and public efforts stimulated game farming through the 1920s, it would wither by WWII, never fully achieving boosters' visions. Part of the explanation lay in game laws, which often circumscribed the sale of game without distinction between farmed and hunted animals. An ironic situation developed, in which some branches of state and federal government worked to prohibit game sales, while others promoted them.³² Just as important, an ecological turn within game agencies turned their focus to wildlife ecology at the expense of game farming initiatives. Two pieces of legislation were also crucial. The Federal Aid in Wildlife Restoration Act (1937) directed firearms and ammunition excise taxes to fund wildlife research, removing the financial necessity of USDA support. And the 1940 creation of the US Fish and Wildlife Service by merging the Biological Survey and the Bureau of Fisheries brought game management and conservation under a new agency; one that moved from the USDA to the Department of the Interior.³³ As a result of these legal, intellectual, and

31. *Agricultural Department Appropriations Bill for 1935, Hearing before the Subcommittee of House Committee on Appropriations, Seventy-Third Congress* (Washington, DC: GPO, 1934), 598-602.

32. Dwight W. Huntington to William Brewster, February 27, 1911, William Brewster Papers, Correspondence, Volume, Huntington, D. W., Harvard University, Museum of Comparative Zoology, Ernst Mayr Library, Cambridge, MA, available digitally at <https://www.biodiversitylibrary.org/item/293058#page/1/mode/1up>; Dwight W. Huntington, "Proposed Law for Breeders," *The Amateur Sportsman* 40, 6 (Apr. 1909): 7-8; Dwight W. Huntington, "The Sale of Game," *Amateur Sportsman* 40, 2 (Dec. 1908): 2-3; Charles Hallock, "Practical Deer Farming," *Field and Stream* 13, 6 (Oct. 1908): 539.

33. Robert M. Rutherford, *Ten Years of Pittman-Robertson Wildlife Restoration* (Washington, DC: Wildlife Management Institute, 1949),

institutional frameworks, game farming never became an economic replacement for market hunting.

Game farming may have failed to effectively “recom-modify” wildlife, but hunting remained a lucrative activity in the twentieth century. The recreational pursuit of game became increasingly monetized, shifting hunting’s value from product to process. The very sportsmen who used the power of the state to eliminate profits in game and encourage restraint did much to build a lucrative new model in its place; one that embraced neoliberalism. This consumerist turn simultaneously emphasized game as exempt from the crassest motivations of capital and recreational hunting as a source of privatized profit.

Key to this new commercialism were sporting magazines. Periodicals editors like Charles Hallock (*Forest and Stream*), George Shields (*Recreation and Shields’ Magazine*), George Bird Grinnell (*Forest and Stream*), Huntington (*Amateur Sportsman*), and Caspar Whitney (*Outing*) had done much to advance conservation causes. They lobbied for closed seasons and bag limits, believed land must be set aside for wildlife habitat, preached the majesty of species like bison and wild turkeys, and decried the millinery trade and market hunters. And they devoted a great deal of ink to support the Lacey Act and similar legislation.³⁴

8-12; Donald W. Sparling, *Natural Resource Administration: Wildlife, Fisheries, Forests and Parks* (San Diego, CA: Academic Press, 2014), 132-136; Dunlap, *Saving America’s Wildlife*, 79. On the era’s general divorcing of the USDA from ecological sciences, see Mark D. Hersey, “What We Need is a Crop Ecologist’: Ecology and Agricultural Science in Progressive-Era America,” *Agricultural History* 85, 3 (Summer 2011): 297-321.

34. The definitive reference on the age’s sporting magazines is M. L. Biscotti, *American Sporting Periodicals: An Annotated Bibliography* (Lanham, MD: Rowman & Littlefield, 2019).

But they were hardly altruistic. Editors saw their magazines as voices for conservation, but also as profit platforms, and they strived to make money even as they touted wildlife as a nonpecuniary resource. The popularity of various campaigns to save wildlife elevated some editors to relative fame, and they took advantage of their profiles to publish popular books on wildlife, hunting, and other outdoor activities. Hallock, for example, published angling stories and a book on camp life.³⁵ Shields released western hunting tales and field guides on big game and game fish.³⁶ And Huntington published illustrated encyclopedias of wild game for general audiences.³⁷ Several magazines also operated their own printing houses, often functioning as additional forums for editors or collecting and reprinting popular serial or thematic articles. *Outing* had perhaps the

35. Charles Hallock, *An Angler's Reminiscences: A Record of Sport, Travel, and Adventure, with Autobiography of the Author* (Cincinnati, OH: Sportsmen's Review Publishing, 1913), quote on 1, chap. 4; Charles Hallock, *Camp Life in Florida; a Handbook for Sportsmen and Settlers* (New York: Forest and Stream Publishing, 1876); Charles Hallock, *The Fishing Tourist: Angler's Guide and Reference Book* (New York: Harper and Brothers, 1873)

36. George Oliver Shields, *Hunting in the Great West: Hunting and Fishing by Mountain and Stream* (Chicago: Rand, McNally & Company, 1883); George Oliver Shields, *Cruising in the Cascades* (Chicago: Rand, McNally & Company, 1889); George Oliver Shields, ed. *The Big Game of North America: Its Habits, Habitat, Haunts, and Characteristics; How, When, and Where to Hunt It* (Chicago: Rand, McNally & Company, 1890); George Oliver Shields, ed., *American Game Fishes: Their Habits, Habitat, and Peculiarities; How, When, and Where to Angle for Them* (Chicago: Rand, McNally & Company, 1892).

37. Dwight W. Huntington, *Our Feathered Game: A Handbook of the North American Game Birds* (New York: Charles Scribner's Sons, 1903); Dwight W. Huntington, *Our Big Game: A Book for Sportsmen and Nature Lovers* (New York: Charles Scribner's Sons, 1904); Dwight W. Huntington, *Our Wild Fowl and Waders* (New York: Amateur Sportsman, 1910).

most ambitious of these arms. Its list included the *Outing Adventure Library*, which reprinted famous works of exploration and hunting with new introductions by Kephart.³⁸ The publisher also issued many stand-alone works focused on the outdoors, from guides to horse care, to descriptions of tarpon fishing, to an early motor-boat repair guide.³⁹ Among *Outing's* well-known authors were Grover Cleveland, Stewart Edward White, and Zane Grey.⁴⁰

In addition to the editors and columnists, advertisers were key voices in sporting magazines. Early periodicals like *Forest and Stream*, which began publication in 1873, carried ads that were small, sparsely illustrated, and not exclusively focused on hunting and fishing products.⁴¹ By 1900, however, sporting magazines were chock full of large, illustrated sales pitches for all sorts of outdoor products. Page after page of these periodicals carried the varied gear that promised to make pursuit of game successful and pleasurable. For example, the ad section in *Forest and Stream's* last issue of the nineteenth century had grown to twelve pages, pitching everything from Remington shotguns to taxidermy services.⁴²

38. At least eight volumes were published in 1915, the *Adventure Library's* first year.

39. David Buffum, *The Horse; His Breeding, Care and Use* (New York: Outing, 1911); Anthony Weston Dimock, *The Book of the Tarpon* (New York: Outing, 1911); Harold Whiting Slauson, *The Motor Boat: Its Selection, Care and Use* (New York: Outing, 1911).

40. Zane Grey, *The Last of the Plainsmen* (New York: Outing, 1908); Stewart Edward White, *The Pass* (New York: Outing, 1906); Grover Cleveland, *Fishing and Shooting Sketches* (New York: Outing, 1906).

41. The initial advertising section is found at *Forest and Stream* 1, 1 (Aug. 14, 1873), 15-16.

42. *Forest and Stream* 53, 27 (December 30, 1899): i-xii.

FLORIDA

THE HOTEL DIXIE.

Ideally located on the banks of the famous Indian River at Titusville, Fla. (East Coast.)

OPENS SATURDAY, DEC. 19th, 1908.

EVERYTHING ENTIRELY NEW.

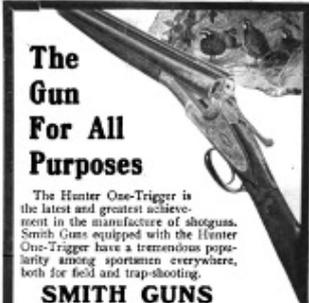
Capacity 200. Rates \$15.00 to \$25.00 weekly.

A Splendid Family Hotel. Every Inducement offered. Appeals especially to lovers of soft, balmy, flower-scented atmosphere. Fishing, Ducking, Heavy Shooting, Orange Picking, and all outdoor sports.

CLUB PRIVILEGE. MUSIC. DANCING.
Headquarters for cut rate sail and power boats.

PRIVATE DOCK.

Address for reservation, rates, transportation, etc.,
ATLANTIC CITY WINTER CLUB (Lessee),
1500 Pacific Ave. Atlantic City, N. J.
WM. F. GREEN, Manager.



The Gun For All Purposes

The Hunter One-Trigger is the latest and greatest achievement in the manufacture of shotguns. Smith Guns equipped with the Hunter One-Trigger have a tremendous popularity among sportsmen everywhere, both for field and trap-shooting.

SMITH GUNS
HUNTER ONE-TRIGGER

The Hunter One-Trigger is the only perfect, practical, one-trigger action ever devised. It cannot balk or double, it meets every requirement, and it overcomes all the familiar drawbacks of two-trigger actions.

THE HUNTER ARMS CO.,
84 Hubbard St., Fulton, N. Y.



Ithaca Guns

EXTRA close shooting, with even distribution and good penetration, are essential qualities that a gun must possess for the very best success at the traps.

Ithaca Guns have a world wide reputation for their superior shooting qualities.

Ithaca Guns are guaranteed in every gun-shooting included.

Hammerless guns are fitted with these bolts and coil main springs, guaranteed safety against breakage, wear, rust or hot action.

"High" Edwards, the veteran barrel borer who first bored Ithaca Guns in 1883, is still at his experiment at your command.

Here is what some of our customers say:

"The No. 4 gun made to my order just received. On the first trial I broke 77 per cent. It is so handy and I am much pleased with it."
—Mrs. E. B. Ballman, Pres. Gun Club, Wyoming, N. Y."

"The Python gun came yesterday. It is a beauty and a hard, close shooter. The boys all tried it at our club shoot and every one pronounced it a peach."
—E. Beckwith, Sec. Mt. Pleasant Gun Club, Mt. Pleasant, Iowa."

Send for Art Catalog and special prices on 18 gauge gun, ranging in price from \$17.75 up to \$300.00 list.

ITHACA GUN COMPANY
Dept. No. 4.
ITHACA, N. Y.

Subscribe to " "

The Amateur Sportsman \$1.00 A YEAR

Ye Anchorage Inn.
BLUE POINT, L. I.

Great South Bay. Duck Shooting.
CAPT. WILL GRAHAM, Proprietor.

Fig. 3. By the early twentieth century, sporting periodicals like *Amateur Sportsman* included substantial advertising sections pitching a wide range of goods and services. *Amateur Sportsman* 40, 2 (December 1908), 26

Some advertisements harkened to the days when wild-life itself was a commodity, even as manufacturers simultaneously touted sportsmanship and game conservation. Piles of dead game in “still life” form fetishized animals as a consumable in ads for guns and ammunition. Marlin Firearms incorporated images of “mountain men” who braved the frontier in the fur trade, while Savage firearms featured Native American hunters taking game in its sales pitches.⁴³ Here, though, the emphasis was on the masculinity of these historical hunters, and not on their mass killing of game for the market. Marlin and Savage sold the idea of the chase and independence, even as they sought corporate profits.

Magazines and editors often copromoted goods with their advertising partners. Among the most frequent and popular features in many publications were new gear tests. *Western Field* was typical in its devotion of a column—“Trade Topics”—to such promotional reviews.⁴⁴ Perhaps most numerous were trials (which often read like endorsements) of firearms and ammunition. For example, *Forest and Stream* ran a series of articles on the “rifles of to-day,” profiling arms from the Bullard, Whitney, Kennedy, Marlin, Winchester, and Remington companies. The flattering, illustrated pieces described the guns’ histories, designs, and often provided their current list prices for readers.⁴⁵ Manufacturers sometimes contested poor

43. Examples include: advertisement, *Forest and Stream* 53, 27 (Dec. 30, 1899): vi; advertisement, *Forest and Stream* 67, 16 (Oct. 20, 1906): 636.

44. “Trade Topics,” *Western Field* 1, 2 (Sept. 1902): 128-130.

45. “Rifles of To-Day: The Bullard Repeating Arm,” *Forest and Stream* 22, 8 (Mar. 20, 1884): 154; “Rifles of To-Day: The Whitney Rifle,” *Forest and Stream* 22, 10 (Apr. 3, 1884): 193; “Rifles of To-Day: The Kennedy Repeating Rifle,” *Forest and Stream* 22, 11 (Apr. 10, 1884): 214; “Rifles of To-Day: Marlin Repeating Rifle,” 22, 13 (Apr. 24, 1884): 252; “Rifles of To-Day: The



Fig. 4. Western Field featured a regular column, "Trade Topics," that covered new gear, often blurring the line between objective review and advertising copy. "Trade Topics," Western Field 11, 1 (August 1907), 77

reviews, sending additional products to the editors, occasionally resulting in revised evaluations.⁴⁶ As written, these tests left relationships between the magazine and the goods uncertain. Was a particular column a manufacturer's pitch, the opinion of a disinterested reader, or the editor's evaluation based on careful testing? It was a confusion that benefited manufacturers.

Winchester Repeating Arm," *Forest and Stream* 22, 17 (May 22, 1884): 334; "Rifles of To-Day: The Remington Rifle," *Forest and Stream* 22, 22 (June 26, 1884): 433.

46. "Pattern and Penetration Tests: The Colt Gun," *Forest and Stream* 33, 14 (Oct. 24, 1889): 266.

Prominent hunting writers' names were also attached to a range of goods, serving as an early form of "celebrity endorsement" and further blurring the lines between objective advice and product promotion. Most editors advertised their own books on woodcraft and hunting in their magazines, and featured writers sold their own lines of gear, which often appeared in the back pages of issues that carried their columns and stories. For example, Kephart designed a bushcraft knife and a .30 caliber hunting bullet⁴⁷; George Washington Sears's pen name (Nessmuck) graced a line of double-bitted axes, canoes, and pocket knives⁴⁸; and Ernest Thompson Seton, co-founder of the Boy Scouts of America, sold his own deer decoys and a tent he claimed was based on "a real Indian form."⁴⁹

Publishers saw little conflict of interest in these actions, having long imagined themselves middlemen brokering exchanges between manufacturers and consumers. Symbolic of this mission, *Forest and Stream* took out exhibition space at Philadelphia's 1876 Centennial Exposition. There, the publisher erected "a complete Hunter's Camp upon a picturesque spot on the grounds" to portray the "devices and appliances of the old time hunter." The camp was half of a classic "before and after" presentation, as inside the exhibition hall, *Forest and Stream* combined efforts with

47. Clipping, Horace Kephart, Journal 07, WCU; Advertisement, *Shooting and Fishing* 30, 3 (May 2, 1901): 59; "The Rifle," *Shooting and Fishing*, 30, 26 (Oct. 10, 1901): 510.

48. Advertisement, *Forest and Stream* 52, 25 (June 24, 1899): iv; "The 'Nessmuk' Knife," *Forest and Stream* 23, 8 (Sept. 18, 1884): 147; "Rushton Canoes," *Forest and Stream* 16, 7 (Mar. 17, 1881): 137.

49. Ernest Thompson Seton, "Deer Hunting with the Bow," *Forest and Stream* 81, 20 (Nov. 15, 1913): 626; Clipping, Horace Kephart, Journal 06, WCU.

the Smithsonian Institution to show visitors the advances made in sporting goods since those “old time” days. The resulting 1,200-square-foot display presented a selection of “all the apparatus and paraphernalia in use by sportsmen and professional fishermen and hunters, including guns, ammunition, nets, boats, clothing, fishing tackle, etc.” The array of goods impressed the crowd and the exposition’s directors, and the magazine proudly informed readers that the exhibition had won a bronze medal. Likewise, in 1895, *Outing* ran a booth at the inaugural Sportsmen’s Exposition held in Madison Square Garden. It displayed artwork from the magazine, but also a range of goods manufactured by companies that advertised in the publication, from fishing rods to boat paddles. Correspondent Edwyn Sandys explained that this gear selection represented an outright endorsement: “Our readers may rest assured that if the above articles were good enough to be selected for *Outing*’s exhibit they are good enough for any purchaser.”⁵⁰

Enforcing game laws and supporting wildlife restoration required funds, and consumers also supplied money for these purposes, entwining sport hunting with state and federal agencies. Individual states founded fish and game agencies in the decades bracketing 1900. Tasked with regulating harvests and enforcing the new rules coming from their legislatures, the agencies generally drew funding from license sales and other taxes on sportsmen. On the federal level, the 1930s became the pivotal decade. In 1934, the Migratory Bird Hunting Stamp Act, or “duck stamp,” an additional license to hunt waterfowl, provided funds for purchasing or acquiring easements on millions of wetlands

50. W. Sandys, “The Sportsmen’s Exposition,” *Outing* 26, 4 (July 1895): 86.

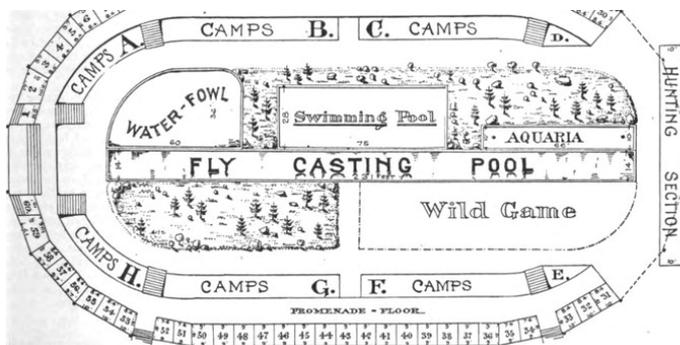


Fig. 5. Diagram of display booths at the 1909 Sportsman's Exhibition held at Madison Square Gardens in New York City. "The National Sportsman's Show," *Amateur Sportsman* 40, 2 (December 1908): 11

acres to serve as game refuges.⁵¹ It was followed three years later by a piece of legislation that further joined consumerism and wildlife conservation. The Federal Aid in Wildlife Restoration Act— better known as the Pittman-Robertson Act, for its co-sponsors, Senators Key Pittman (Nevada) and A. Willis Robertson (Virginia)—applied an excise tax on firearms and ammunition sales to wildlife conservation purposes. The act produced several million dollars annually from the start; so much revenue that wildlife managers struggled to spend it all. Pittman-Robertson funds would ultimately support research, aid restoration programs, and be used to purchase hundreds of thousands of acres of public game lands. The money also flowed through state game agencies, cementing their centrality in wildlife man-

51. Nathaniel P. Reed and Dennis Drabelle, *The United States Fish and Wildlife Service* (Boulder, CO: Westview Press, 1984), 22, 50-52.

agement. A similar tax on fishing tackle and licenses later raised revenue for game fish conservation, and together the three pieces of legislation firmly wedded game management to sportsmen's consumption.⁵²

At its heart, then, the new state of conservation that emerged to preserve wildlife and regulate its hunting rested not just on hunters' interest in preserving game, but in their active consumerism. Lacking the ability to tax game itself as a commodity, the state turned to the halo of indirect profit generated by hunting, the consumerism built by manufacturers, advertisers, and sportswriters, with enthusiastic participation by the mass of hunters. Agency employees were the bureaucratic children of the elite sportsmen who had established the sporting ethic of the turn of the century, translating their high-minded ideals into wildlife reserves, propagation programs, and game laws. Wildlife managers recognized this codependence. In the eyes of the state, hunters rather than game became the commodity; each body in the woods represented the sale of a license and tax revenue from their purchase of firearms and ammunition. Game was the lure, sport was the product.⁵³

This consumerism had its critics. For example, editor George Shields worried about the excesses of certain technologies, such as repeating shotguns, even as he pitched

52. Rutherford, *Ten Years of Pittman-Robertson*, 8-12; Dunlap, *Saving America's Wildlife*, 79; Federal Aid in Sport Fish Restoration Act, 16 U.S.C. §§ 777-777, 1950.

53. Burton L. Dahlberg and Ralph C. Guettinger, *The White-Tailed Deer in Wisconsin*, Technical Wildlife Bulletin Number 14 (Madison: Wisconsin Conservation Department, Game Management Division, 1956), 207; *Deer in 1970* (Lansing: Michigan Department of Natural Resources, 1970), 6; Banasiak, *Deer in Maine*, 1.

other gear. And “primitivists” emerged advocating a return to simpler hunting forms, like archery and the use of muzzleloading firearms. In these older technologies, they saw a purer form of the chase that might accomplish the sporting ethic’s aims without all of the consumer trappings. Ecologist and hunter Aldo Leopold explained that judicious hunters ought to use “mechanical aids, in moderation, without being used by them.”⁵⁴ Critics’ voices were ultimately overwhelmed, however, by the rising tide of commercialism. Manufacturers continued to make modern firearms, hunters purchased them, and the state taxed them and used the revenue to support wildlife conservation. And archery and muzzleloading developed their own catalogues of specialized gear, manufacturers, retail outlets, and trade magazines, becoming as thoroughly consumerist as other forms of the hunt. Americans had made their peace with buying wildlife, one experience at a time.

The commercialization of recreational hunting was thus firmly entrenched by WWII, but it merits quick mention that this consumer culture only expanded thereafter. Advertising campaigns became more costly and sophisticated. Sporting magazines proliferated, from more general gear-centered new publications like *Guns and Ammo* (with roughly six million monthly readers by the late twentieth century) to specialized periodicals like those focused on archery hunting.⁵⁵ Hunting films pitched gear and expe-

54. Aldo Leopold, *A Sand County Almanac, and Sketches Here and There* (1949; New York: Oxford University Press, 1989), 181.

55. Gregg Lee Carter, ed., *Guns in American Society*, 2 volumes (Santa Barbara, CA: ABC-CLIO, 2002), 1:249-250; Eric Mogren, “Miss Billie’s Deer: Women in Bow Hunting Journals, 1920-1960,” *Journal of Sport History* 40, 2 (Summer 2013): 215-239.

riences, and turned select hunting personalities into minor celebrities. The rise of sporting cable networks like the Outdoor Channel and Outdoor Life Channel in the late 1990s provided yet another pop cultural outlet for both sport hunting and gear.⁵⁶ And hunting video games, internet video platforms, and social media bring today's hunters together in increasingly specialized groups.⁵⁷ These new media continue to tap the old formula created by Progressive-Era conservationists: wildlife serves as totem and trophy rather than resource; the concept of the fair chase remains entwined with ideas about masculinity; and the pleasure of consumption is pervasive.

Indeed, by the early twenty-first century hunting as recreation had become an integral part of the national consumer economy. Whereas a national survey reported that US sportsmen spent a little more than \$10 billion on the pastime in 1985, that figure had risen to \$26.2 billion dollars annually by 2016. This increase came despite a slight decline in the number of reported hunters. And it is worth noting that these surveys did not include items like four-wheel-drive trucks and all-terrain vehicles that might be used for hunting in addition to other activities; nor did it account for the full value of wildlife watching, an activity

56. Lee McGuigan, "The Hunting Industry: Exploring the Marriage of Consumerism, Sport Hunting, and Commercial Entertainment," *Journal of Consumer Culture* 17, 3 (2017): 921-922; Joe Flint, "It Isn't Sex, or City, but It's Hot on Cable TV," *Wall Street Journal*, August 11, 2003, B1; Nadine Heintz, "Catering to Those who Want Their Gun TV," Inc. 25, 7 (July 2003): 30; "Outdoor Channel," *Advertising Age, Cable Guide*, 79 (2008): C64.

57. Tom Austin, "Plugged-In Hunting," *Outdoor Life* 217, 9 (Oct. 2010): 40; Naarah Catherine Sawers and Kristen Demetrius, "All the Animals Are Gone? The Politics of Contemporary Hunter Arcade Games," *Continuum: Journal of Media and Cultural Studies* 24, 2 (April 2010): 245; Joshua Quittner, "Big-Game Hunting," *Time* 152, 23 (Dec. 7, 1998): 240.

also tied to game conservation programs, meaning the real economic impact of hunting and game is certainly larger still. The surveys also did not assign any monetary value to game as meat, leather, etc., the products of the hunt that were once important commodities; an omission symbolic of just how thoroughly the economic value of wildlife had shifted in a century.⁵⁸

CONCLUSION

The early decades of the twentieth century saw the transformation of US wildlife from an economically important natural resource into a state-owned public amenity. This shift was primarily motivated by practical concerns about greatly diminished game populations, and undergirded with a moral framework celebrating the abstract value of game, the demeaning nature of hunting for profit, and the manly and salubrious qualities of the chase. This shift occurred quickly, and with such thoroughness that a reversion to game as a commodity is virtually unimaginable.⁵⁹

To be clear, although the decommodification of American game was an intentional campaign fusing private conservation interests and public legal structures, the increasing profitability of sporting goods that took its economic

58. *1985 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation* (Washington, DC: US Department of the Interior/US Department of Commerce, 1988), 4; *2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation* (Washington, DC: US Department of the Interior/US Department of Commerce, 2018), 4.

59. For one contemplation of renewed market hunting of deer, see Kurt C. Vercauteren et al., "Regulating Commercial Harvest to Manage Overabundant White-Tailed Deer: An Idea to Consider?," *Wildlife Society Bulletin* 35, 3 (Sept. 2011): 185-194.



A whole new field of sport

A WONDERFUL NEW GAME is tucked up in the trim, compact assembly of the Winchester Junior Trapshooting Gun—the Winchester game of family trapshooting—an entirely new contribution of infernal sport to the American people.

You know what wonderful training for eye and touch the veteran trapshooter gets—the splendid nervous relaxation that comes from smacking the flying clay "birds." The Winchester Junior Trapshooting Gun brings these benefits to you and every member of your family—without any very moderate cost.

A family gun club in itself.

Take a look at the outfit in your dealer's window. Note the tank, perfectly proportioned .410 caliber sport gun. Observe the efficient little barrel trap and the "Midgee Clay" birds—include the clay targets you set out at the Gun Club, but smaller in size. The Winchester Junior Trapshooting Gun is a family gun club in itself. The little sport gun is accurate and dependable. Use all the world-famous Winchester shotgun.

Every part of the assembly is skilfully worked with the Winchester high standard of quality.

Women and children enjoy shooting the little sport gun. Its .410 caliber is so small that the gun has practically no recoil. Yet men and

boys who are accustomed to bigger shotguns admire its beautiful lines, superior balance—and its accuracy.

Have a family shooting outfit.

Get for a family shoot! Slip the outfit in the back of the car. Or is it a hunting party? Show the outfit in. All kinds of games can be enjoyed with the outfit. Boys, women girls, and the younger children, individual matches, tournaments and parties. Keep the record of your shooting outings. It will enhance the sport.

There's no limit to the fun you can have with the Winchester outfit. Clay targets and ammunition are both inexpensive. The sport gun and the hand trap, weak power ones, will last for years. It is the most economical sport you could pick out considering the fun it will provide.

Your dealer has it.

Call on your dealer today and look at this storehouse of new sport. Handle the little sport gun, fit it to your shoulder. You can't keep your hands off it. Because the whole assembly. Every requisite for days of sport has been provided. If your dealer cannot supply you write us direct.

WINCHESTER REPEATING ARMS COMPANY
Dept. 4028 New Haven, Conn., U. S. A.



The clay targets are packed in this box. Will hold twenty-five targets in your outfit.



The simple Winchester hand trap will hold any size of the little sport gun.



The Winchester Junior Trapshooting Gun is packed in this carrying case. Will hold the gun, the hand trap and all the other accessories.



The new Winchester Junior sport gun is accurate and dependable in all the world-famous Winchester shotguns.



The simple Winchester hand trap will hold any size of the little sport gun.

WINCHESTER

World Standard Guns and Ammunition

Fig. 6. Manufacturers like Winchester often linked consumption with pleasure, a message most American hunters internalized as the twentieth century progressed. "A Whole New Field of Sport," *Outers' Recreation* 61, 4 (October 1919), 290

place was not similarly orchestrated. The monetization of recreational hunting was, instead, part of larger waves of manufacturing efficiencies, mass advertising, and increasing working-class leisure time.⁶⁰ These big forces intersected with specific promoters of gear and consumerism, such as the writers noted in this paper. Despite being unintentional, this commercialization consistently tapped into the language and reasoning of the sporting ethic to promote the sale of gear as integral, rather than superfluous, to wildlife conservation.

And this is ultimately more than just an American story. US wildlife managers have worked to export this “North American model of wildlife conservation” and management to other parts of the globe—including among its seven core principles the elimination of markets for game and the concept of wildlife as an international resource—and it has steadily gained traction in a number of countries. Promoters of the North American model envision little short of a wildlife conservation version of the Green Revolution.⁶¹

60. Lawrence B. Glickman, *A Living Wage: American Workers and the Making of Consumer Society* (Ithaca, NY: Cornell University Press, 1999); Cindy S. Aron, *Working at Play: A History of Vacations in the United States* (New York: Oxford University Press, 1999); Richard Ohmann, *Selling Culture: Magazines, Markets, and Class at the Turn of the Century* (New York: Verso, 1996); Jackson Lears, *Fables of Abundance: A Cultural History of Advertising in America* (New York: Basic Books, 1995); William R. Leach, *Land of Desire: Merchants, Power, and the Rise of a New American Culture* (New York: Pantheon, 1993).

61. John F. Organ, Shane P. Mahoney, and Valerius Geist, “Born in the Hands of Hunters: The North American Model of Wildlife Conservation,” in *Essential Readings in Wildlife Management and Conservation*, Paul R. Krausman and Bruce D. Leopold, eds. (Baltimore, MD: Johns Hopkins University Press, 2013): 25-27; Roderick P. Neumann, *Imposing Wilderness: Struggles over Livelihood and Nature Preservation in Africa* (Berkeley: University of California Press, 2002).

Profit in hunting as recreation and consumer experience may not be a formal part of the model, but it certainly undergirds it, making the altruistic statements possible. The US Fish and Wildlife Service openly acknowledges as much, noting that more than 75 percent of state fish and game agencies' budgets come from license sales and consumer taxes, and explaining that "the Service works closely with industry and states to ensure the funds are spent on conservation programs.. When hunters and anglers purchase equipment, they are contributing to benefits that everyone can share."⁶²

The economic activities associated with hunting today are not the product of commodities in a classic sense. They might more accurately be described as luxuries, artisan goods, or service products. In the sense that each animal holds economic value, however, the state still manages and speaks of game as a commodity, with each white-tailed deer, for example, likely of greater economic importance today than at any time under the market-hunting regime.⁶³ This North American model of wildlife management may now seem "natural," but it is very much a culture and legal construction built from the wreckage of the long-standing commodification of the nation's game. It is a strange fusion of neoliberalism and the managerial state, and it represents a fundamental shift in the relationship between humans and the nonhuman world.

62. Brent Lawrence, "North American Model of Wildlife Conservation: Wildlife for Everyone," April 4, 2022, at <https://www.fws.gov/story/2022-04/north-american-model-wildlife-conservation-wildlife-everyone>.

63. One 1997 estimate placed net value of the national herd at \$12 billion, or between \$300 and \$400 per animal. Michael R. Conover, "Monetary and Intangible Valuation of Deer in the United States," *Wildlife Society Bulletin* 25, 2 (Summer 1997): 302.

PART IV
COMMODITIES AND ECONOMIC
DEVELOPMENT

Black Sea Durum Wheat between the 19th and 20th centuries: International Trade and Industrial development in Italy

Manuel Vaquero Piñeiro and Luciano Maffi

In the period from the second half of the 19th century to the first three decades of the 20th century, a number of agricultural plants and products played a decisive role in shaping the world economy.¹ In the context of early globalization, the inclusion of agricultural commodities strengthened long-distance trade and the spatial integration of regions.²

1. Vicente Pinilla, "Agricultural Development in the World Periphery: A General Overview," in *Agricultural Development in the World Periphery. A Global Economic History Approach*, eds. Vicente Pinilla and Henry Willebald (Cham: Palgrave, 2018), 3-28.

2. Edward B. Barbier, "Golden Age of Resource-Based Development (from 1870 to 1914)," in *Scarcity and Frontiers: How Economies Have Devel-*

Due to the implications of the phenomenon of grain trade, part of the more complex relationship between economic development and agricultural transformation,³ the topic constitutes the leitmotif of an intense historiographical debate. Recent studies have highlighted the dynamics present in the formation of trade networks that were decisive in shaping the economic profile of large areas of the planet. A rich repertoire of issues emerges from the available bibliography. Eloquent in this sense is the historiography on commodities such as cotton, palm oil or soy,⁴ which have highlighted the environmental consequences of the expansion of the western economy.⁵

This brief introduction is enough to emphasise that the agricultural commodity chains constitute a fertile ground for exploring the contribution of world trade to the birth of contemporary agriculture.⁶ Biological innovations in

oped Through Natural Resource Exploitation, ed. Edward B. Barbier (New York: Cambridge University Press, 2011), 368-462.

3. Ellen Hillbon and Patrick Svensson, eds., *Agricultural Transformation in a Global History Perspective* (New York: Routledge, 2013).

4. Martin Lynn, "Bristol, West Africa and the Nineteenth Century Palm Oil Trade," *Historical Research* 64, no. 155 (1991): 359-74; Martin Lynn., *Commerce and Economic Change in West Africa. The Palm Oil in the nineteenth century* (New York: Cambridge University Press, 2002); Jonathan E. Robins, *Oil Palm. A Global History* (Chapell Hill: The University of North Carolina Press, 2021); Valeria Giacomini, "The Transformation of the Global Palm Oil Cluster: dynamics of cluster competition between Africa and Southeast Asia (c. 1900-1970)," *Journal of Global History* 13, no. 3 (2018): 374-98.

5. Alfred W. Crosby, *Ecological Imperialism: the biological expansion of Europe, 900-1900* (New York: Cambridge University Press, 2015).

6. Jonathan Curry-Machado, ed., *Global Histories, Imperial Commodities, Local Interactions* (London: Palgrave Macmillan, 2013); Sandip Hazareensingh and Harro Maat, eds., *Local Subversions of Colonial Cultures: Commodities and Anti-Commodities in Global History* (London: Palgrave Macmillan, 2016); Kevin H. O'Rourke and Jeffrey G. Williamson, *Globaliza-*

agriculture stimulated the development of an important business. International markets expanded,⁷ the number of economic players increased, the relationship between economic and scientific interests intensified, states intervened directly, and the integration of agriculture and industry strengthened. All this favored the accumulation of agricultural innovations and biological changes. Trade took over the distribution of new plants, new goods, new products. Processes that drove productive specialization and the regional division of labor according to the climatic and environmental characteristics of the territories.⁸

As our study on durum wheat shows, the formation in Italy of a production fabric for pasta manufacturing attests to the integration of foreign trade relations and industrialization. Although durum wheat, compared to soft wheat, constitutes a very small percentage, it confirms the need to intensify studies on individual products. In the scenario of trade flows generated by the marketing of durum wheat from the second half of the 19th century onwards, Italy plays the role of a “central” country. If we place this reflection in the context of theories of divisions of economic

tion and history: the evolution of the nineteenth-century Atlantic economy (Cambridge: MIT Press, 1999); Ronald Findlay and Kevin H. O'Rourke, *Power and plenty: trade, war, and the world economy in the second millennium* (Princeton: Princeton University Press, 2007).

7. Gema Aparicio, Vicente Pinilla, Raül Serrano, “The World Periphery in Global Agricultural and Food Trade, 1900-2000,” in *Agricultural Development in the World Periphery. A Global Economic History Approach*, eds. Vicente Pinilla and Henry Willebald (Cham: Palgrave, 2018), 63-88.

8. Josep Pujol-Andreu, “Environment conditions and biological innovations in European agrarian growth,” in *Land, shops and kitchens. Technology and the food chain in twentieth-century Europe*, eds. Carmen Sarasúa, Peter Scholliers and Leen Van Molle (Turnhout: Brepols, 2005), 42-67.

development between “center” and “periphery”⁹ it confirms what Giovanni Federico wrote about the need to reconstruct the world market for individual products. From this point of view, and with regard to the construction of world trade networks for durum wheat, we can hardly relegate late 19th century Italy to the position of mere “periphery”.¹⁰

In Italy, after the birth of the Kingdom of Italy in 1861, the first industrial experiences aimed at processing agricultural products, such as pasta factories using durum wheat. If in a first phase, which lasted until around the First World

9. Yujiro Hayami and Vernon W. Ruttan, *Agricultural Development: An International Perspective* (Baltimore: Johns Hopkins University Press, 1985); Paul Bairoch, *L'agriculture des pays développés 1800 à nos jours* (Paris: Economica, 1999); Vernon W. Ruttan, “Productivity Growth in World Agriculture: Sources and Constraints,” *The Journal of Economic Perspectives* 16, no. 4 (2002): 161-84; Giovanni Federico and Karl G. Pearson, “Market integration and convergence in the world wheat market, 1800-2000,” in *The new comparative economic history: essays in honor of Jeffrey G. Williamson*, eds. Timothy J. Hatton, Kevin H. O'Rourke and Alan M. Taylor (Cambridge: MIT Press, 2007), 84-114; Vicente Pinilla, ed., *Markets and Agricultural Change in Europe from the 13th to the 20th century* (Turnhout: Brepols, 2009); Gema Aparicio, Vicente Pinilla and Raül Serrano, “Europe and international trade in agricultural and food products 1870-2000,” in *Agriculture and economic development in Europe since 1870*, eds. Pedro Lains and Vicente Pinilla (London-New York: Routledge, 2009), 52-75; Jose A Ocampo, Mariangela A. Parra-Lancourt, “The Terms of Trade for Commodities Since the Mid-19th century,” *Revista de historia economica. Journal of Iberian and Latin American Economic History* 28, no. 1 (2010), 11-44; Ellen Hillbom and Patrick Svensson, eds., *Agricultural Transformation in a Global History Perspective* (London-New York: Routledge, 2013); Philip McMichael, *Food Regimes and Agrarian Questions* (Halifax and Winnipeg: Fernwood Publishing, 2013); Harriet Friedmann and Philip McMichael, “Agriculture and the State System: The Rise and Decline of National Agriculture”, *Sociologia Ruralis* 29 (2008), 93 – 117.

10. Giovanni Federico, “Commercio estero e «periferie». Il caso dei paesi mediterranei”, *Meridiana* 4 (1988), 163-196; Ivan T. Berend and Gyrgy Ranki, *The European periphery and industrialization* (Cambridge: Cambridge University Press, 1982).

War, a panorama formed by a plurality of small factories predominated, later, starting in the 1920s and then with greater intensity during the 1930s, the strengthening took place of a few industrial groups.

There is currently a substantial lack of studies on cereal cultivation in Italy after the Unification, so that an exhaustive overview has not yet been defined. Undoubtedly, the theme of cereal cultivation returns forcefully in studies on Fascism and the regime's policies: historiographically, in fact, cereal cultivation in Italy has been investigated mainly with reference to the twenty years of Fascism.¹¹ For the phase prior to Fascism, and especially for the final decades of the 19th century, the reference text still remains that of Giorgio Porisini.¹² However, although it is a detailed work on production, productivity and prices, no distinction is made in it between durum wheat and soft wheat, assembling very different cereal-growing realities, which are, among other things, to be traced back to geographically distinct but defined territorial areas.

The practice of not distinguishing durum wheat from soft wheat in official surveys, while recognizing their different uses for making pasta (durum wheat) and bread-making (soft wheat), can be found in almost all statistics and studies published in Italy between the end of the 19th and

11. Alexander Nützenadel, *Landwirtschaft, Staat und Autarkie. Agrarpolitik im faschistischen Italien* (Tübingen: Max Niemeyer, 1997); Stefano Grando and Gianluca Volpi, "Backwardness, modernization, propaganda: agrarian policies and rural representation in the Italian Fascist regime," in *Agriculture in the age of fascism*, eds. Lourenzo Fernández-Prieto, Juan Pan-Montojo and Miguel Cabo (Turnhout: Brepols, 2014), 43-84.

12. Giorgio Porisini, *Produttività e agricoltura: i rendimenti del frumento in Italia dal 1815 al 1922* (Milano: Giuffrè, 1972).

the beginning of the 20th century.¹³ Not even the International Institute of Agriculture (based in Rome), author since 1909 of in-depth surveys on world and national production of agricultural commodities, makes any distinction between durum and common wheat. Trying to provide a probable explanatory hypothesis for the widespread practice of combining the two grains under a single statistical heading and remembering that durum wheat constitutes a very small part of world cereal production, one might think of the great variety of wheat varieties grown in Italy, including the so-called “semi-hard” ones, distinguishable by reference to soil, climate, yield, further cultivation characteristics, and the choice of providing an overview rather than disclosing more detailed data. The non-distinction between the two types of wheat has meant that the specificities of the two varieties have not been taken into account in the many studies conducted on cereal production and trade. Specifically, our research aims to show that international trade in *Triticum durum* constitutes an important chapter in the globalization of wheat. Although it constitutes a fairly small percentage of the total mass of wheat at the center of international trade, the fact that it was an indispensable raw material for Italian pasta factories constitutes an excellent case study of the interaction between commodification of agricultural materials and food industry development.

13. Augusto Salucci, *Il frumento in Italia: economia, storia, coltivazione* (Feltre: premiata tip. Panfilo Castaldi, 1905); see also: Maic, *Notizie intorno alle condizioni dell'agricoltura. I conti culturali del frumento* (Roma: Tipografia Eredi Botta, 1887); Maic, Ufficio di Statistica Agraria, *La coltivazione del frumento in Italia: studi e cenni illustrativi raccolti per la Esposizione agricola di Parma del 1913* (Roma: Tip. Nazionale G. Bertero, 1913).

NATIONAL PRODUCTION AND IMPORTS
OF DURUM WHEAT

At the beginning of the 20th century, the average Italian durum wheat production was 930,000 tons, corresponding to about 23% of the entire national cereal harvest.¹⁴ Italian durum wheat production capacity increased during the first thirty years of the century; in fact, between 1931 and 1934, it exceeded 1.5 million tons (Table 1).¹⁵

TABLE 1. PRODUCTION OF DURUM WHEAT, ITALY
(1909-1913, 1931-1934)

YEAR	TONS	YEAR	TONS
1909	1,030,000	1931	1,300,000
1910	860,000	1932	1,600,000
1911	1,130,000	1933	1,700,000
1912	740,000	1934	1,600,000
1913	890,000		

Source: for the years 1909-1913, G. Valenti, *Granaglie*, pp. 48-49 for the years 1931-34, Hellman Shollenberger, *Wheat Requirements in Europe*, p. 115

In Italy, durum wheat production was predominant on the islands of Sicily and Sardinia and in the provinces of Salerno, Lecce and Potenza.¹⁶ In the first years of the 20th

14. Ghino Valenti, *Granaglie: produzione, commercio, regime doganale* (Roma: Tip. nazionale Bertero, 1918), 49.

15. Joseph Heilman Shollenberger, *Wheat Requirements in Europe: Especially Pertaining to Quality and Type, and Type and to Milling and Baking Practices* (Washington: United States Department of Agriculture, 1936).

16. Valenti, *Granaglie*, 49.

century, the total wheat production in Italy was 1.43 million tons, of which 0.93 million corresponded to durum wheat,¹⁷ a production capacity that would rise to 1.39 million tons in the early 1930s.¹⁸ Therefore, based on the data available for the early 1900s, it is not incorrect to affirm that the cultivation of durum wheat in Italy, although practiced in a limited number of provinces, nevertheless contributed a high proportion of the entire grain production. Unfortunately, for the final decades of the 19th century, the scarcity of data makes it impossible to compare and establish whether this situation at the beginning of the 20th century can also be referred to the preceding period.

Looking at imports, foreign purchases remained stable at under 500,000 t. until the early 1880s, when a sharp fall was recorded, reaching a low of 147,000 t. in 1881. The parabola was then upward again until it exceeded one million tons in 1887. From this point on, even in years dominated by the trade of large quantities of American wheat,¹⁹ imports did not collapse, remaining steadily above half a million tons.²⁰

17. Maic, *Il frumento in Italia: produzione, consumo, prezzi* (Roma: Tip. nazionale G. Bertero, 1914), p. 54.

18. Institut International d'Agriculture, *Le premier recensement agricole mondial (1930)* (Roma, Impr. De la Chambre des Députés, 1939), 46.

19. Scott Reynolds Nelson, *Oceans of grain. How American wheat remade the world* (New York: Basic Books, 2022).

20. Regarding world grain trade see: Wilfred Malenbaum, *The world wheat economy 1885-1939*, (Cambridge (Ma.), HUP, 1953); A.J. Lathan and Larry Neal, "The International Market in Rice and Wheat 1868-1914", *Economic History Review*, XXXVI (1983), 268-280; Hans-Joachim Braun, Petr Kosina, Thomas Payne and Alain P. Bonjean, "The international wheat trade – historical, current and prospective trends," in *The World Wheat Book. A History of Wheat Breeding vol. 3*, eds. Alain P. Bonjean, William Angus, Maarten Van Ginkel (Paris: Lavoisier, 2016), 1559-

Even in Italy, the arrival of non-European wheat favored the approval of protectionist measures. However, researchers have pointed out how imports followed their own dynamics, scarcely influenced by the adoption of stricter fiscal policies.²¹ It is no coincidence that even before the end of the 19th century, and then during the first fifteen years of the following century, imports surged sharply to over 2 million tons between 1910 and 1915 (Table 2).

The radical decrease in durum wheat imports from 1930 onward is not only a result of the negative consequences for international trade of the '29 crisis but also a result of the increase in domestic production of durum wheat as a result of both the policy imposed by fascism to achieve grain self-sufficiency and the spread of Nazareno Strampelli grain cultivation.²²

Another aspect worth mentioning is the relationship between durum wheat production and imports. In average terms, between 1907 and 1913, the average production of durum wheat in Italy was 930,000 tons. During the same years, average imports of durum wheat were around 610,000 tons. Overall, durum wheat availability in Italy, including both production and imports, was 1.57 million tons. Compared to total availability, durum wheat imports came so close to the national production capacity that they amounted to 65% of the entire national harvest (Fig. 1).

96; Gema Aparicio and Vicente Pinilla, "International trade in wheat and other cereals and the collapse of the first wave of globalization, 1900–38," *Journal of Global History* 14, no. 1 (2019): 44–67.

21. Stefano Fenoaltea, *L'economia italiana dall'Unità alla grande guerra* (Roma-Bari: Laterza, 2006).

22. Tiago Saraiva, *Fascist Pigs. Technoscientific Organisms and the History of Fascism*, 2018 (Cambridge, Ma: MIT, 2018).

TABLE 2. IMPORTS OF DURUM AND SOFT WHEAT (1901-1938). TONS

YEARS	DURUM WHEAT	SOFT WHEAT	TOTAL
1901-05*	469.800	605.100	1.074.900
1907	540.000	511.600	1.107.300
1908	540.000	965.400	1.608.300
1909	650.000	1.508.500	1.825.600
1910	660.000	1.694.600	2.131.000
1911	519.544	1.831.400	2.241.900
1912	600.355	1.641.400	2.146.300
1913	787.631	1.821.262	2.608.893
1914	501.960	513.767	1.015.727
1915	421.884	1.023.102	1.444.986
1916	291.729	1.538.000	1.830.000
1917	438.117	1.478.000	1.916.000
1918	120.226	1.421.000	1.541.000
1919	264.077	1.840.000	2.104.000
1920	182.143	1.936.000	2.118.000
1921	532.000	2.265.000	2.799.000
1922	505.000	2.265.000	2.681.000
1923	655.000	2.175.000	2.788.000
1924	436.400	2.133.000	2.131.000
1925	410.500	1.694.000	2.241.900
1926	504.900	1.831.000	2.146.000
1927	590.000	1.718.100	2.308.100
1928	733.600	2.011.200	2.744.800
1929	589.900	1.174.900	1.764.800
1930	649.600	1.285.100	1.934.700
1931	355.400	1.129.600	1.485.000
1932	262.500	793.700	1.056.200
1933	97.000	368.500	465.500
1937	13.000	1.644.000	1.657.000
1938	12.000	277.000	829.000

* Annual average.

Source: Maic, *Il frumento in Italia*

Black Sea Durum Wheat between the 19th and 20th centuries

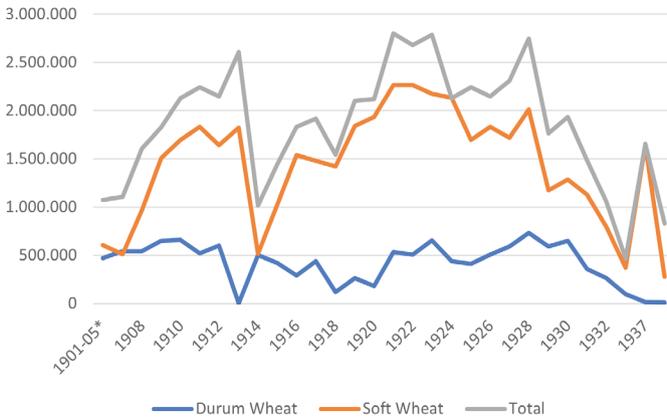


Fig. 1. Imports of durum and soft wheat (1901-1938). Tons
Source: Maic, *Il frumento in Italia*

It should be noted, in order to understand the data in the tables, that cereal imports into Italy were divided into two macro-categories: “permanent imports” and “temporary imports”. This distinction was made purely on the basis of tax burdens. As far as we are interested here, temporary wheat imports included imports of wheat volumes for the production of pasta and semolina to be sent abroad at a later date. Thus, while imported common wheat was used to cover domestic market needs, durum wheat was used to make pasta for export. The first information on temporary imports is from the last years of the 19th century.²³ Before the end of the century, imports rose from 18,286 to 34,970

23. Luigi Clerici, “Le importazioni temporanee di grani esteri in Italia,” *Giornale degli Economisti* 25, (1902): 30; Luchino Franciosa, *Il frumento. Superficie, produzione, commercio, prezzi, consumo nel ventennio 1909-1928* (Roma: Tipografia della Camera dei Deputati, 1929), 65.

tons, and the positive trend was consolidated in the first decade of the 20th century. In fact, between 1909 and 1915, temporary imports of durum wheat in Italy averaged 125,000 tons, 22% of the permanent imports.

With reference to Italian imports, data on the places of origin of durum wheat unanimously point to the irreplaceable role played by Russia, particularly the Black Sea area. In 1899, imports from Russia of soft wheat amounted to 170,754 T. and those of durum wheat to 248,370 T. Quite similar figures were recorded for the following years: 272.132 tons of durum wheat and 285.531 tons of soft wheat in 1900; 593.148 tons of durum wheat and 406.904 tons of soft wheat in 1905.²⁴ Italy thus proved to be a clear importer of wheat, depending largely on harvest trends in the southern regions of Russia.

Until the First World War, Russia played the indisputable role of the main supplier of durum wheat to Italy. As Table 3 shows, imports of durum wheat from Russia, specifically from the Black Sea region, remained predominant until 1909.²⁵ From 1899 to 1906, imports from Russia increased from 250,000 to 500,000 tons (66% of total imports).²⁶ To the imports of durum wheat, imports of soft wheat should be added. Here, too, there was an important increase: from 170,754 tons in 1899 to 439,516 tons in 1906. In total, at the end of the first decade of the 20th cen-

24. Camera dei deputati. *Legislatura XXII, sessione 1904-909. Raccolta degli atti stampati*, vol. 23 dal n. 791 al n. 875 (Roma: Tip. Camera dei deputati, 1909), 15.

25. Giacomo Acerbo, *La economia dei cereali nell'Italia e nel mondo* (Milano: Hoepli, 1934), 875.

26. Camera dei deputati, *Atti Parlamentari. Raccolta degli atti stampati*, vol. 23, dal 791 al 875, (Roma: Tipografia della camera dei deputati, 1909), 15.

TABLE 3. IMPORTS OF DURUM WHEAT INTO ITALY (1872-1933). PERCENTAGES

Years	Russia	Turkey	USA	Argentina	Canada	Australia	Other
1872-1875	47,8	33,6	---	---	---	---	18,6
1886-1890	61,1	11,6	---	---	---	---	27,3
1896-1900	82,8	---	---	---	---	---	17,2
1906-1909	61,1	---	13,3	---	---	---	25,6
1914-1920	5,6	---	49,9	23	---	---	21,5
1921-1924	---	---	58,4	11,5	16	10,8	3,3
1925-1928	2,5	---	42,9	15,4	20	12,3	6,9
1929-1932	14,1	---	19,7	16,5	26,5	13,8	9,4
1930	15,6	---	17,8	8,6	32,9	10,3	14,8
1931	27,2	---	18,8	10,8	19,2	18	6
1932	16,8	---	18,8	26,1	12,1	22,5	3,7
1933	12,8	---	44,4	14,7	12,5	12,6	3

Source: Giacomo Acerbo, *La economia dei cereali*

ture, Italy imported more than one million tons of wheat, both durum and soft, from Russia.

Before the revolution, all sea and river ports in the region (Rostoff, Novorossik, Nicolaieff, Taganrog, Odessa)²⁷ were equipped with silos and mechanical systems for moving and storing goods. Compared to Italian wheat, Black Sea wheat had a lower price, making its importation worthwhile. If 100 kg of ‘national’ durum wheat cost around 34.5 Italian Lire in Naples, wheat from Taganrog in the same city had a price of 32.73 Lire/100 kg. Thus the convenience is evident of importing durum wheat from the Black Sea to the detriment of the best Italian grains produced in Southern Italy, which were generally more expensive.

In addition to Russia, imports from Turkey were also found in the latter part of the 19th century, but these disappeared with the 20th century. The trade in durum wheat from Russia declined rapidly from the beginning of the World War. At the same time, the axis of imports quickly shifted from the Black Sea to other cereal-growing regions of the world, such as British India and, first and foremost, the United States. From 1914 to 1928, the dominance of the United States appears overwhelming, reaching almost 60% in the period 1921-24.

27. Anna Sydorenko, “*Crimean port-cities on a race of export grain trade: infrastructure, external trade and shipping. Evpatoria, Sevastopol, Theodosia (second half of the 19th – beginning of the 20th century)*”, in Evrydiki Sifneos†, Oksana Iurkova and Valentyna Shandra (eds), *Port-Cities of the northern shore of the Black Sea: Institutional, Economic and Social Development, 18th – early 20th Centuries*, Black Sea History Working Papers, volume 2 (Rethymnon: Centre of Maritime History, Institute for Mediterranean Studies – Foundation of Research and Technology, 2021); Ead., *The Economic Development of the Crimean Port-Cities, Second Half of the 19th – beginning of the 20th century. Evpatoria, Sevastopol, Theodosia*, (unpublished Ph.D. thesis, Ionian University, Corfu, 2017), chapter six.

In fact, between 1920 and 1928, US durum wheat exports averaged 865,501 tons per year. In 1929 this ample supply of durum wheat destined for the foreign market was reduced to half, 402,786 tons, to drop further to 46,266 tons in 1932.²⁸ The effects of the severe international crisis of 1929 can also be seen here, which in fact decreed the sudden downsizing of the United States as a grain exporting power. Wheat production in the US fell from an annual average of 22.5 million tons in 1924-28 to 19.5 million tons in 1934-38; during this period, US wheat exports plummeted from 3.6 million tons to almost 7.7 thousand tons.²⁹

The 1930s presented new scenarios, because along with the downsizing of the role of the United States, the international scene appeared more diversified (Fig. 2). First of all, we note the return of exports from the Soviet Union around 1930, a consequence of a consistent growth in cereal production. It should be remembered that Italy was one of the first countries to officially recognize the USSR, signing a trade and navigation treaty with it in 1924. The good relations between both countries were further strengthened with the signing of a non-aggression pact in 1933. Thus, the return of wheat exports, albeit in smaller quantities compared to the prevailing situation at the beginning of the century, formed part of an international policy tending towards openness. However, the downsizing of US exports was to a large extent compensated for by Canada, Argentina and Australia, whose exports, although contracting after 1929, were more resilient.

28. Hellman Shollenberger, *Wheat Requirements in Europe*, 2.

29. *Les grandes produits agricoles. Compendium international de statistiques*, (Rome: Institut International d'Agriculture, 1948), 27.

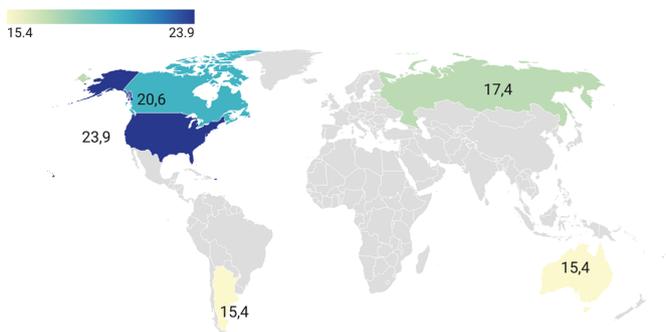


Fig. 2. Durum wheat imported to Italy in the 1930s. Percentages
Source: Maic, *Il frumento in Italia*, 54

Of all the countries, the most remarkable case, and the one that best reflects the changes that had taken place worldwide in cereal growing, is Canada, which had grown dramatically to make it, along with the United States, the leading country in terms of cereal production and exports. In fact, from 1909-13 to 1924-25, Canada increased its wheat exports due to a significant increase in production,³⁰ from almost 5.5 million tons to 9.5 million tons of food grains.³¹ In order to achieve a rapid increase in production, the state granted large subsidies in money and land, and also supported the construction of the railway network. The result was the creation, starting in the early 20th century, of an integrated system of connections linking Lake Superior, the St. Lawrence River and export ports. As a

30. Trevor Dick, "Canadian Wheat Production and Trade 1896-1930", *Explorations in Economic History*, 17 3 (1980), 275-302

31. Giorgio Mortara, *Prospettive economiche. Anno settimo 1927*, (Città di Castello: Tip. Leonardo da Vinci, 1927), 15.

result, Canada's wheat production grew from 7.3 million tons to 10.5 million tons, largely for export. However, along with Canada's excellent environmental conditions, mention should also be made of the scientific effort made to obtain grain varieties adapted to the climatic conditions of the different areas of the country. Particularly important is the story of Red Fife, which was the subject of continuous hybridization within the framework of experiments conducted by the Experimental Farms Service, founded in 1886. The most brilliant result, after a whole series of crosses, including with grains from other countries (Russia, India) was the obtaining of a variety called Marquis whose commercialization, also in the hard variant, began in 1909. The wheat from Canada was an immediate success in Italy as its flour, mixed with flours from native wheats, proved to be of excellent milling and cooking quality, even in the manufacture of pasta.³²

On the subject of international cereal trade, it is necessary to point out that, while Italy was an importer of wheat, at the same time it also generated export trade flows; in fact, in the 1860s, Italy imported between 4 and 6 million hectoliters of wheat, but exported considerable quantities of the same commodity. In fact, the durum wheat sector generates a complex commercial puzzle. While Italy imported large quantities of durum wheat from the Black Sea to meet the demand of pasta factories, at the same time it exported domestic durum wheat of higher quality at higher prices.³³

32. A.B. Campbell and Leonard H. Shebeski, "Wheat in Canada - past and present," in *Wheat Production in Canada - A Review*, eds. Al E. Slinkard and Brian D. Fowler (Saskatoon: University of Saskatchewan, 1986).

33. *Relazione della commissione parlamentare d'inchiesta sul corso forzoso dei biglietti di banca*, volume III, (Firenze: Eredi Botta, 1869), 155.

The essential role played by cereal imports (soft and durum wheat) in the Italian milling and pasta-making industry raises the problem, still insufficiently investigated, of the relationship between the processes of concentration of the international supply chain and the progressive consolidation in Italy of an industrial sector capable of breaking away from traditional artisan-family manufacturing.³⁴

There is undoubtedly a parallelism between these processes, since the industrial groups that began to form in Italy at the turn of the 19th and 20th centuries related to a world scenario in which the landscape of raw material supplies was dominated by a few large groups that held the reins of trade and governed transactions according to the logic of the great commercial capitalism that was based in a few large world marketplaces (Chicago, London).

In fact, given the massive international process of concentration at the level of raw material supply, it is evident that a dual process was taking place in each individual country. On the one hand, industrial groups were formed that grew to the extent that they entered into direct relations with the giants of world distribution: these were productive subjects that, also because of the distribution of raw materials, invoked the path of capital assets, mechanization, recourse to inanimate energy, and the construction of large factories.³⁵ On the other, a myriad of small operators, remaining circumscribed to a more local level,

34. Manuel Vaquero Piñeiro, "Processi di globalizzazione e tendenze protezionistiche. L'industria dell'olio di semi in Italia (1861-1945)," *Storia economica*, no. 24, 1-2 (2021): 310-338.

35. Francesco Chiapparino, "Tra polverizzazione e concentrazione. L'industria alimentare dall'Unità al periodo tra le due guerre," in *Storia d'Italia. Annali* 13. *L'alimentazione*, eds. Alberto Capatti, Alberto De Bernardi and Angelo Varni (Torino: Einaudi, 1998), 207-28.

acted on small and medium-range channels for access to raw materials and the marketing of finished products. These seemingly opposing typologies are, however, to be understood as the logical result of the evolving trends of the international dimension of the commodity trade.

TRADE NETWORKS BETWEEN ITALY
AND RUSSIAN BLACK SEA PORTS

From the second half of the eighteenth century political, commercial and cultural relations developed between the Italian states and the Russian Black Sea basin.³⁶ Italian penetration into the Black Sea region constitutes an interesting page in both the expansion of Italian shipping and the creation of solid trade networks. As is well known, the first agreement between Russia and the Kingdom of the Two Sicilies was signed in 1777, while in 1794 Empress Catherine II entrusted the Neapolitan Giuseppe De Ribas with the leadership of work on the foundation of the city of Odessa,³⁷ giving priority to the port, a preparatory

36. Vincenzo Giura, *Una fonte per lo studio dei rapporti commerciali tra il Regno di Napoli e l'impero Russo nel secolo XIX* (Padova: Giuffrè, 1966); Vincenzo Giura, *Russia, Stati Uniti e Regno di Napoli nell'età del Risorgimento* (Napoli: ESI, 1967); Luigi Mascilli Migliorini, Mirella V. Matrici, eds., *Mediterraneo e/è Mar Nero. Due mari tra Età moderna e contemporanea* (Napoli: ESI, 2012); Francesco D'Esposito, "Il Mar Nero e l'approvvigionamento di grano duro nei pastifici napoletani del decennio post-unitari," in *Il settore agro-alimentare nella storia dell'economia europea*, eds. Ezio Ritrovato e Giovanni Gregorini (Milano: FrancoAngeli, 2020), 178-94.

37. About the history of the city of Odessa, see: Patricia Herlihy, *Odessa. A History 1794-1914* (Cambridge: Harvard University Press, 1986); Patricia Herlihy, *Odessa Recollected. The Port and the People* (Boston: Academic Studies Press, 2019); Anna Makolkin, *History of Odessa. The Last Ital-*

infrastructure for the development of the fleet and trade. Starting from this period, Odessa became one of the most important trading centers in the networks linking the Black Sea and the Mediterranean.

Until the mid-19th century, Odessa was home to the economic activities of an enterprising Italian community³⁸ involved in building a fluid and profitable grain trade with the Italian peninsula. Navigation between Italian ports and southern Russia was facilitated by the granting of tax concessions and the stipulation of trade agreements such as, for example, the one signed in 1787 between Russia and the Kingdom of Naples, which allowed Neapolitan vessels to sail under the Russian flag so as to have easier transit along the coast of Turkey. One of the most important aspects of this particular Black Sea-Mediterranean trade link was the arrival of large consignments of Russian wheat in Italian ports and the consequent commercial development of certain maritime infrastructures.³⁹ In this regard, one of the best known cases concerns the port of Livorno, which became a veritable grain platform during the first half of

ian Blank Sea Colony (Lewiston: E. Mellen Press, 2004); Charles King, *Odessa. Genius and Death in a City of Dreams* (New York: W. W. Norton & Company, 2012); Evrydiki Sifneos, *Imperial Odessa: Peoples, Spaces, Identities* (Leiden: Brill, 2017).

38. See: Anna Makolkin, *One Hundred years of Italian Culture on the shores of the Black Sea (1794-1894)* (Lewiston-Queentown-Lampeter: The Edwin Mellen Press, 2000).

39. Gelina Harlaftis, Victoria Konstantinova, Igor Lyman, Anna Sydo-renko and Eka Tchkoïdze, eds., *Between grain and oil from the Azov to the Caucasus: the port-cities of the eastern coast of the Black sea late 18th-early 20th century - Black Sea History Working Paper, vol. 3* (Rethymnon: Centre of Maritime History, Institute for Mediterranean Studies – Foundation of Research and Technology, 2020).

the 19th century,⁴⁰ and whose trade was favored by the free trade encouraged by the Grand Duchy of Tuscany and stimulated by the growing English demand for cereals after the Corn Laws.⁴¹

In the wake of the international grain trade, Italian trading houses operating in Odessa and other urban centers in the area increased in number to a maximum of 50 before the Crimean War (1856). As evidenced by the buildings of the Italian trading houses and major businessmen residing in Odessa and other southern Russian ports, the Italian presence also left important traces in the urban and architectural structures of the Black Sea cities.⁴²

However, in the middle of the 19th century, the Crimean War marked a negative turning point followed by a fast decline. The Italian community fell from almost 4,500 people in a few years to just 2,000-1,660 individuals and the Italian firms,⁴³ as well as the Greek ones, were replaced by financially much more solid Jewish houses (Mendelevich, Reiberman, Favelievitch, Frenkel, Gausner); the once flourishing Ligurian houses disappeared altogether.⁴⁴ This collapse can also be measured by observing the changes

40. Patricia Herlihy, "Russian Wheat and the Port of Livorno 1794-1861," *The Journal of European Economic History* 5, no. 1 (1976): 45-68.

41. Jeffrey G. Williamson, "The impact of the Corn Laws just prior to repeal," *Explorations in Economic History* 27, no. 2 (1990): 123-56.

42. Patricia Herlihy, "Commerce and Architecture in Odessa in Late Imperial Russia," in *Commerce in Russian Urban Culture 1861-1914*, eds. William Craft Brumfield, Boris V. Anan'ich and Yuri A. Petrov (Baltimore-London: The Johns Hopkins U.P., 2001), 180-94.

43. Fratelli Casareto, C. De Azarta, Giacomo Porro, Francesco Rocca, F.lli Rocca, Napoleoni Rossi, De Giovanni, G.A. Simoni, C. Tagliaferro, F.lli Chiarello, Simone Tagliaferro, G.B. Rocca, F.lli Tubino, Luigi Rossi e C.

44. *Archivio economico-amministrativo. Monitore delle colonie, vol. 2* (Roma: Ludovico Cecchini, 1877), 149.

that affected the fleets in Russian ports during this period. Until the middle of the century, Italian vessels exercised a clear dominance over the port of Odessa.⁴⁵ But immediately afterwards began the crisis generated both by the downsizing of the economic influence of Italian trading houses and by the inability of Italian shipowners to adapt to the technical changes that were sweeping the shipping sector with the transition from sail to steam. In fact, while in 1870, 996 sailing ships and 300 steam ships left Odessa, two years later, there were 541 sailing ships and 501 steam ships.⁴⁶ As for the Italian vessels, 191 were sailing vessels while only one (out of the total 501) was steam-powered. To these technological shortcomings must also be added that Italian ships arrived empty at Russian ports, in fact limited only to loading grain for transport back to Italy without having any goods to trade. By 1894, the Italian trading houses in Odessa had been reduced to only three, which, demonstrating broad roots in the economic reality of the region, still exported 1,478,452 hectoliters of grain.

One of the strongest Italian trading houses, which in the second half of the 19th century had the resources to meet the challenges generated by the transport revolution, was the house of the Anatra brothers, originally from Sicily. The house, founded in 1869, “in addition to the grain trade [...] dealt in the import of English hard coal, and in this branch of commerce [it] prevailed over all others engaged in the same trade in Odessa”.⁴⁷ In addition to owning

45. *Rivista periodica dei lavori della R. Accademia di scienze, lettere ed arti in Padova*, volume XXIII, 1872-1873 (Padova: G.B. Randi, 1873).

46. *Rivista periodica dei lavori*.

47. Ministero per gli affari esteri, *Bollettino consolare*, vol. XIII, p. I (1873), 557.



Fig. 3. Mulino Fratelli Anatra, Odessa, 1900-1914

Source: <https://www.romanovempire.org/media/moulin-fratelli-anatra-factory-odessa-1900-1914-4ae920> (last reference: June 2022)

a large mill in Odessa (Fig. 3), by 1877 the Ditta F.lli Anatra operated four ships and was also the owner of the agency office of the La Trinacria Steamship Company.

Italian-Russian trade was initially regulated by the trade treaty signed on 28 September 1863 and later modified by the treaty signed in 1878⁴⁸. The trade balance was clearly in favor of Russia, whose exports far exceeded the few items that made up the limited range of Italian products destined for Russia. Cereals were by far the most dominant goods. In 1885, the value of cereals exported from Russia to Italy was about 86 million Italian lire, practically 94%

48. Gerolamo Bassani, "La politica economica e i trattati di commercio dell'Italia dall'Unità alla Guerra," *Annali di Economia* 8, no. 1 (1932): 31-67; Vincenzo Cacciapuoti, *Relazioni commerciali tra l'Italia e la Russia (1878-1927)* (Napoli: Stab. Tip. N. Jovene, 1928).

of the total (91,586 million); Italian exports amounted to 18 million, with pasta (20%), animal products (14.7%) and olive oil (12.3%) dominating⁴⁹. This situation was destined to remain more or less unchanged until the outbreak of the Soviet revolution, and only changed by the introduction of some new imported (mineral oils, oilseeds) and exported products (hard stones). After the birth of the Soviet Union, the value of Russian exports to Italy experienced a real collapse (-85%), while Italian exports to Russia remained stable, even experiencing a slight growth⁵⁰.

With regard to the ports of destination in the transition from the 19th to the 20th century, Naples is the leading port (Table 4, Fig. 4). The demand for raw material from the numerous pasta factories active in the Neapolitan area explains the pre-eminence of this port. Immediately following it in importance, we find Genoa. Here too, the weight of demand generated by local pasta factories must be assessed, even though the Ligurian port also functioned as an intermediation point with other economic areas, as some of the imported wheat then passed on to European markets. Other important ports were Catania in Sicily, and Livorno in the center of the peninsula.

The high fertility of Russia's Black Sea basin region allowed for abundant and regular harvests, and farmers could exploit the same land for several years without having to leave it uncultivated with cereals for too long. Moreover, the wheat produced was a grain that possessed a singular richness in gluten and was particularly suit-

49. Cacciapuoti, *Relazioni commerciali*, 16-7.

50. Cacciapuoti, 88, 90.

Black Sea Durum Wheat between the 19th and 20th centuries

TABLE 4. IMPORT OF DURUM WHEAT: PORTS (YEAR 1911)

PORTS	TONS	PERCENTAGE
Genoa	77,337	19
Livorno	42,098	10
Venice	16,908	4
Naples	173,946	43
Bari	17,087	4
Catania	64,984	16
Palermo	8,917	2

Source: Maic, *Il frumento in Italia*, 54

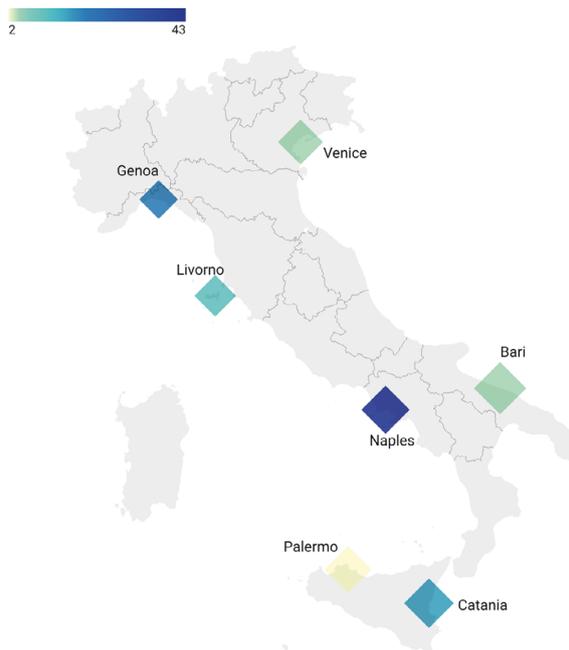


Fig. 4. Import of durum wheat: ports (year 1911). Thousands of tons
Source: Maic, *Il frumento in Italia*, 54

able to complement locally produced European grains.⁵¹ At the time of Italy's supremacy in the Black Sea grain trade, Odessa was home to wheat from an extensive region stretching between southern Russia and much of Poland. The grain collection mechanism, which covered a vast geographical area between the Don and Dniester rivers, involved a plurality of intermediaries who collected the grain on behalf of export companies. In turn, the export companies worked on behalf of either the large European grain companies, or the political representatives of foreign powers. The chain involved a continuous flow of financing that allowed banks and international credit to penetrate the Russian grain market.⁵²

Considering the volumes and turnover of durum wheat required to meet the domestic needs of the Italian pasta industry, it is not surprising that the US government sought precise information on the nature of the trade, hoping for a radical downsizing of the hegemonic Russian position. After a careful analysis of this specific sector of the world cereal market, the experts commissioned by the US government came to the conclusion that the durum wheat grown in the United States did not meet the needs of pasta making as it was produced in Italy.⁵³ It was said that American durum wheat, lacking gluten, did not give pasta the necessary milling hardness; furthermore, the duration of the Atlantic voyages diminished the quality of the semolina.

51. Ugo Caprara, *Il commercio del grano. Parte I. I mercati esportatori* (Milano: Soc. An. Istituto Editoriale Scientifico, 1928).

52. Scott Reynolds Nelson, *Oceans of grain. How American wheat remade the world* (New York: Basic Books, 2022), 204-19.

53. Mack H. Davis, *Flour and Wheat Trade in European Countries and the Levant* (Washington: Government Printing Office, 1909), 113-6.

What emerged from these study missions led the US government to recognize the importance of penetrating the international market for durum wheat. The United States was observing this specific type of wheat with interest because it moved an intense trade round to Italy. The U.S. strategy included gathering information on the different types of wheat, and the most convenient seeds. It was not only a matter of inserting oneself in international trade but also of fostering domestic production to cover the demand created by the pasta industries that were emerging in the country. Available data indicate that the production of durum wheat in the United States was limited to less than 2,000 tons, a production situation that was destined to change in a short time: in 1904, production was 450,000 tons.⁵⁴

In Italy, pasta and other grain derivatives (semolina, flours) resulting from the processing of durum wheat generated an intense commercial movement, especially in the years before the start of the First World War. This was the time when, to a large extent, the industry was consolidated, giving Italian pasta a global dimension. However, in order to understand the trend of Italian wheat pasta exports, a fundamental clarification must be made. As we have seen above, imports of durum wheat for the manufacture of pasta were made in Italy using temporary imports, but from a statistical point of view, it is only from 1906 onward that the figures reflect exports that were also the result of temporary imports. This fact explains the very low figures for Italian pasta exports prior to this year. On average, in the last decade of the 19th century, pasta exports recorded in

54. Mark A. Carleton, *The Commercial Status of Durum Wheat* (Washington: U.S. Government Office, 1904), 66-7.

official statistics did not even reach 4.5 tons; an excessively low figure.⁵⁵

In reality, exports were much higher, but the official statistics before 1906 did not count exports resulting from temporary imports of durum wheat. Hence, an exact comparison of the results cannot be made because in 1906 alone, 49,138 tons of durum wheat were imported. This fact supports the thesis that Italy was able to impose its pasta thanks to massive wheat imports from the Black Sea; domestic cereal production was completely insufficient.⁵⁶

In 1906, exports were close to 50,000 tons and this volume of foreign sales remained until 1910-1913 when the trend line exceeded 60,000 tons, reaching 70,000 tons in 1913. This was the most expansive phase of Italian exports of durum wheat products (Fig. 5). The situation worsened after the First World War: in 1914 it fell to 64,439 T. and the fall continued in the following years: in 1916, 16.683 T.; 1917, 2.491 T.; and 1918, 8 T. The trend experienced its first positive turn in 1919, when exports became 2.459 T. The 1920s mark a recovery without, however, returning to pre-war levels. Stability is observed around 1.5 T. Once the crisis of the early 1930s is over, the line rises again, thanks mainly to exports to the African colonies.⁵⁷

If we now look at the markets to which Italian pasta was destined, we can observe some important changes in the first thirty years of the century. Until the beginning of the First World War, the main and almost sole reference market was the United States, which alone absorbed 76%

55. Maic, *Il frumento in Italia*, 54-6.

56. Maic, 54-6.

57. *Annuario statistica italiano, anno 1937* (Roma: Istituto centrale di statistica, 1937), 126.

Black Sea Durum Wheat between the 19th and 20th centuries

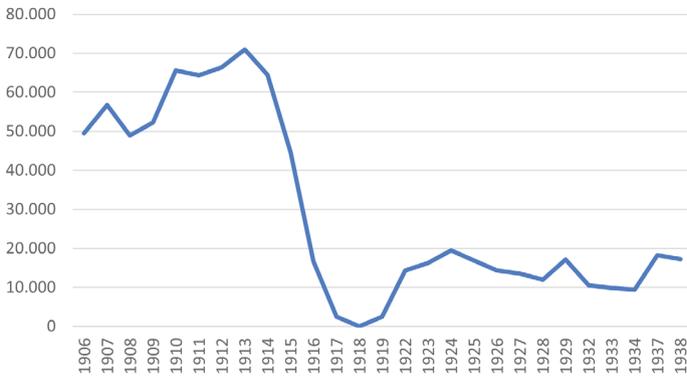


Fig. 5. Foreign trade in wheat products Italy: paste (1906-1934). Tons
Source: Original preparation by the authors with annual data from the *Annuario Statistico Italiano*

of Italian pasta exports: 50,715 tons in 1910. After WWI, the United States market experienced a radical downsizing for Italian pasta exports until they disappeared during the 1920s (2,126 tons in 1925). Imports of Italian pasta, starting from the years of the First World War, were in fact replaced by domestic production.⁵⁸

In fact, between 1921 and 1927, 350 to 400 macaroni manufacturers operated in the United States, with a total production of about 250,000 tons, which in fact largely covered domestic demand, negating the need to import pasta.⁵⁹ Industry observers recognized that the main cause

58. *Annuario statistico italiano, anno 1927* (Roma: Istituto centrale di statistica, 1927), 177.

59. *Hearings before the committee on ways and means house of representatives. Seventieth Congress. Second session. Vol. VII. Schedule 7. Agricultural products and provisions* (Washington: Government Printing Office, 1929), 4343-46.

of the radical deterioration of Italian pasta exports was the closure of imports of durum wheat (hard glutenous wheats) from Russia. Without this raw material, Italian factories could not produce good quality pasta. Another detail highlighted by the investigations made by the United States authorities is the vast differences that existed in working conditions: while a worker in Italy earned 18 to 20 Italian lire, equivalent to \$1 per day, in the pasta factories in the United States the wage was \$6 to \$7. Once the expansive season in the American market was over, Italian pasta exporters tried in the 1920s-1930s to find other markets but the results did not allow them to recover their losses. The European markets of Great Britain (between 2 and 3 thousand tons per year), France (9.605 T. in 1914 to 1.772 T. in 1925) and Switzerland (from 7.161 T. in 1914 to 1.688 T. in 1929) remained strongly reduced. Outside this logic, we find sales in the African colonies, but here too there was a reduced commercial capacity.

CONCLUSIONS

At present, world production and consumption of durum wheat have a strongly regionalized structure. *Triticum turgidum* or *Triticum durum* accounts for about 5% of world wheat production, i.e., about 35 million tons. Globally, the cultivation of this cereal variety, unlike common wheat, which is grown practically everywhere, is mainly localized in three geographical areas: the Mediterranean (North Africa and Southern Europe), the northern plains of the United States of America (North Dakota and Montana) and Canada (Saskatchewan and Alberta), and the desert areas between the South-West of the United States (California,

Arizona) and Northern Mexico (Baja California and Sonora). In addition to these three main areas, there are other areas of lesser importance (Russia, Kazakhstan, Australia, India, Argentina). Canada is the largest producer of durum wheat in the world, with annual production of between 4.5 and 6 million tons.⁶⁰ As far as consumption is concerned, primacy belongs to the countries of the Mediterranean basin. Among the importing countries, Italy leads the way with 2.7 MT, its famous pasta industry depending on purchasing large quantities of durum wheat abroad. A fairly similar situation can be found in Arab countries, where durum wheat participates in the population's staple diet as the main ingredient in the manufacture of semolina products, such as couscous and bulgur.

As we have analyzed in this study, this situation is largely the result of the industrialization of pasta production in Italy between the 19th and 20th centuries. If we look at the international market for durum wheat, Italy plays a central role as an importer. At first, the needs of the domestic industry were met with Russian wheat from the Black Sea region, but the Bolshevik revolution and the outbreak of the First World War radically changed this picture. The sharp reduction in Soviet exports was compensated for by exports from the United States and Canada. Italy continued to depend on international trade and, in less than a decade, shifted the axis of wheat supply from the Russian area to North America. This shift signaled a concrete interrelationship between the needs of the national pasta industry and the drivers of international trade.

60. Fernando Martínez-Moreno, Karim Ammar and Ignacio Solís, "Global Changes in Cultivated Area and Breeding Activities of Durum Wheat from 1800 to Date: A Historical Review," *Agronomy* 12, no. 1135 (2022) [<https://doi.org/10.3390/agronomy12051135>].

There is still room for further inquiry into the trade in durum wheat. There are dimensions of the topic that need to be better understood, such as the role of intermediaries and the emergence of trading companies specializing in international trade. For the time being, what is clear is that the pasta industry has played a decisive role in the construction of today's world trade relations in durum wheat.

Evolution of the crop composition of Greek agriculture before EEC accession: evidence from seven representative crops in 52 districts

Tryfonas Lemontzoglou and Juan Carmona-Zabala

We aim to describe the main trends that characterized the evolution of Greek agriculture between 1964 and 1980 in terms of the crops that were produced, and to identify some factors that explain, at least in part, such trends. We pay attention to a series of quantitative and qualitative shifts in the crop composition at the district (Gr. *nomos*) level. We intend to interpret the changes in the production volume of seven representative crops of Greece's agricultural sector (wheat, tobacco, cotton, tomatoes, potatoes, and oranges/lemons), as the outcome of different degrees of availability of factors of production (land, capital and

labor). The lack of consistent, large datasets on agricultural prices precludes the possibility of quantifying output in terms of agricultural incomes; hence, we chose to focus on the volume of goods produced. The statistical methods that we deploy in this article are useful from the point of view of the historiography of commodities, at the very least as a way to identify correlations that can later be further examined using the qualitative tools of the historian. More specifically, they enable us to formulate questions regarding the relationship between different commodities that could either “compete” for resources such as land or investment in technology, or conversely complement each other in the efficient exploitation of such resources. Furthermore, it becomes easier to identify the degree to which agricultural commodities are labor- or technology-intensive, and to hint at explanations for diverging patterns of geographic distribution.

The official statistical data that we have digitized and analyzed covers an important period in the history of the Greek economy. It includes roughly the last decade of the so-called Greek economic miracle of 1953-1973, and the difficult years of economic instability and political liberalization that preceded EEC accession in 1981. For the most part, the data that we analyze were originally published by the Hellenic Statistical Authority as part of the series *Annual Agriculture Statistics*.¹ They cover all of Greece’s 52 districts for the period 1964-1980. The data available for the years prior to 1964 are not as detailed at the district lev-

1. Hellenic Statistical Authority, “Annual Agriculture Statistics,” Digital Library (ELSTAT), accessed January 15, 2023, http://dlib.statistics.gr/portal/page/portal/ESYE/categoryyears?p_cat=10007963&p_topic=10007963.

el. After 1981, Greece was already an EEC member, which means that the agricultural sector was shaped by a series of new incentives and constraints imposed by the Common Agricultural Policy. We selected seven representative crops for our sample. We consider them representative on the grounds that, within their respective crop categories (industrial plants, vegetables and garden crops, etc.), they are the most relevant in terms of cultivated acreage.

In this study, cultivated land, agricultural machinery and the absence of labor due to emigration feature as factors that determine the production of these crops, although we also enquire into whether the opposite might be true, i.e., whether changes in production levels might cause emigration or technological diffusion. We identified correlations between these factors by exploring their linear associations and, in some cases, conducting Granger causality tests. The only data presented in this chapter that are not drawn from the *Annual Agriculture Statistics* series are those on migration. These were originally published by the same agency as part of the series *Statistical Yearbook of Greece*.² We carried out all empirical analyses using econometric software, EViews.

In the first part of this text, we describe the partial shift that took place from old to new crops, i.e., from crops considered at the time to not have much potential to contribute to future economic growth (mainly tobacco, currants and wheat), to those considered to have it (cotton, fresh produce). This distinction is also based on the interest

2. Hellenic Statistical Authority, "Statistical Yearbook of Greece," Digital Library (ELSTAT), accessed January 15, 2023, http://dlib.statistics.gr/portal/page/portal/ESYE/categoryyears?p_cat=10007369&p_topic=10007369

that state agencies showed in promoting the new crops. During the 1960s and 1970s, there was a reorientation of agricultural policy, with state programs aiming at the expansion of new crops, in some cases at the expense of the old.³ While we abstain from taking a stance on whether the distinction between old and new was sufficiently justified or beneficial, we do use these terms throughout the text. The shift from old to new crops manifested itself, first and foremost, as a decrease in the amount of land used for the production of arable crops and vineyards, and as an expansion of the land allocated to fruit trees and vegetables. This trend, however, was not pronounced enough to bring about any radical changes in the general crop mix that characterized Greek agriculture in terms of cultivated acreage, whether we look at individual crops or at crop categories. The existing economic historiography has commented on this relative stasis of the crop mix, and pointed at this as evidence of the limits of the Greek economic miracle of the 1950s and 1960s.⁴

In addition to nationwide trends in land use and production, in the first section we focus on the district level.

3. Ministry of Coordination (Υπουργείο Συντονισμού), Πενταετής Πρόγραμμα Οικονομικής Αναπτύξεως της Χώρας 1960-1964 (Εθνικό Τυπογραφείο, 1960), 30-31. Center of Planning and Economic Research (Κέντρον Προγραμματισμού και Οικονομικών Ερευνών), Σχέδιον Προγράμματος Οικονομικής Αναπτύξεως της Ελλάδος (1966-1970) (Athens, 1965), 15-16.

4. Vasilis Patronis and Panagiotis Liangovas (Βασίλης Πατρώνης and Παναγιώτης Λιάγκοβας), “Κοινωνική ενσωμάτωση και οικονομική πολιτική στα χρόνια της δικτατορίας στην Ελλάδα, 1967-1974: ο ειδικός ρόλος του αγροτικού τομέα,” *Ελληνική Επιθεώρηση Πολιτικής Επιστήμης* 23 (2004): 131-132; Dimitris Panagiotopoulos (Δημήτρης Παναγιωτόπουλος), *Οι αγρότες στην ελληνική ιστορία: από την επανάσταση στην παγκοσμιοποίηση* (Athens: Πατάκης, 2022), 404.

This level of analysis allows us to identify significant variation in the geographic distribution of crops, and in the degree of specialization in a specific crop that one encounters in different locations. Here, we conceptualize a district's specialization as having a high percentage of land dedicated to the production of a given crop. One can distinguish a southern pattern characterized by higher specialization in a number of new crops, and a central-northern pattern where old crops (tobacco and wheat) as well as cotton are more prevalent.

In the second part of the article, we discuss the growth of production volumes for the seven selected crops, and confirm once again the existence of two differentiated geographic areas based on crop specialization: north and south. At the same time, we observe a second level of distinction based on the degree of concentration of a crop. Crops such as wheat, tomatoes and potatoes are comparatively spread out throughout the Greek geography, with a large number of small production nuclei. In contrast, citrus fruits and industrial crops (tobacco, cotton) are highly concentrated either in the north-center, or the south of the country.

The third part of the article presents a wide range of findings regarding the technological progress of Greek agriculture during the period under study. We show empirically that there are positive, statistically significant correlations between the diffusion of agricultural technologies and output growth in the seven representative crops. The almost invariably positive character of this correlation exists despite the continued prevalence of the old crops, and can be explained on the grounds of the responsiveness of virtually all the selected crops to the new conditions created by the expansion of irrigation. This adaptability char-

acterized even a number of old crops, such as tobacco and cotton, allowing with relative ease the use of irrigation equipment. The possibility of increasing production with the aid of technological equipment could sometimes make the shift away from old crops unnecessary. Furthermore, some of the seven products appear to respond in similar ways to the same technologies. It is for this reason that we can speak of relations of complementarity between some crops that can benefit from the adoption of the same technologies in the same location.

Last, the fourth section of the article points at the existence of a negative, statistically significant correlation between emigration overseas and the growth of the production volumes. We can therefore classify the selected crops depending on the degree to which they present these two characteristics: capital intensity and labor intensity. At the same time, the remarkably negative, statistically significant correlations between emigration and the influx of new agricultural machinery allow us to question the view that emigration led, in the long-run, to the modernization of agricultural production by raising labor costs.⁵

CHANGES IN LAND USE

The evolution of the Greek agricultural sector in the second half of the twentieth century consisted of a reduction

5. This is the view presented in Socrates D. Petmezas, "The Modernisation of Agriculture in Greece (c. 1920-1970): Variation of a European Mediterranean Model?," in *Integration through Subordination: The Politics of Agricultural Modernisation in Industrial Europe*, ed. Tony Varley and Peter Moser (Brepols Publishers, 2013), 109–131.

Evolution of the crop composition before EEC accession

of the total area of cultivated land, especially in the case of the old crops. There was also a reduction in the size of the rural population, due to emigration to urban centers in Greece and overseas.⁶ While arable crops and vines show the sharpest reduction in terms of land, there was an increase in the cultivation of fruit trees (Table 1). More concretely, between 1964 and 1981 the acreage cultivated with vines in Greece shrank by 21%, while in the case of arable crops the shrinkage amounted to 11%. Fruit tree cultivation expanded by an impressive 44% in the same period.

TABLE 1. DISTRIBUTION OF AGRICULTURAL USE OF LAND IN GREECE (NATIONAL LEVEL), DISAGGREGATED BY CROP CATEGORY

CULTIVATED LAND (IN THOUSANDS OF STREMMATA) ¹	1964	1968	1972	1976	1981	CHANGE (%)
Arable crops	27,271	26,114	24,896	24,837	24,237	-11%
Vegetables, other garden crops	1,167	1,135	1,015	1,011	1,155	-1%
Vines	2,348	2,267	2,153	2,033	1,863	-21%
Fruit trees	5,824	6,399	7,095	7,706	8,399	+44%
Total	36,610	35,915	35,159	35,587	35,654	-3%

Source: Hellenic Statistical Authority, "Annual Agriculture Statistics."

These trends are evident even when we move to a deeper level of analysis, i.e., at the level of specific crops. Tobacco areas in Greece experienced a very significant decrease of 38% during the period 1964-1980. The area

6. Petmezas, "The Modernisation of Agriculture in Greece."

cultivated with wheat also fell significantly, by 20%. In the same period, the area cultivated with fruit trees increased by a remarkable 73%. A significant increase of 39% was also recorded in the cultivable areas for *Other trees* (with the dominant product being the olive tree), while the areas for citrus fruits also increased by 22%. An increase of 71%, quite impressive in relative terms although less so in terms of absolute total acreage, was also recorded in the area dedicated to tomato production. The area used for the production of potatoes recorded an 11% increase (Table 2).

TABLE 2. DISTRIBUTION OF AGRICULTURAL USE OF LAND IN GREECE, DISAGGREGATED BY CROP (NATIONAL LEVEL)

CULTIVATED LAND (IN THOUSANDS OF STREMMAS)	1964	1968	1972	1976	1980	CHANGE (%)
Wheat	12,631	10,997	8,850	9,307	10,119	-20%
Tobacco	1,432	1,123	841	1,143	892	-38%
Cotton	1,412	1,410	1,742	1,499	1,424	+1%
Potatoes	583	541	517	649	647	+11%
Tomatoes	280	326	303	307	478	+71%
Citrics	387	416	444	464	472	+22%
Fruit trees	383	467	584	608	608	+73%
Other trees	4,614	5,079	5,454	5,940	6,416	+39%

Source: Hellenic Statistical Authority, "Annual Agriculture Statistics."

Despite noticeable changes in absolute terms per crop, we do not observe any major shifts in the share that each crop, or crop category, represented relative to total land use during the period leading up to EEC accession (Table 3). Between 1964 and 1980, wheat appears to take up

Evolution of the crop composition before EEC accession

about 35% of the total arable land of the country, followed in second place by *Other trees*, which represent about 20% of all arable land. The remaining areas are divided among other agricultural products, which present much lower values. Among those remaining crops, we find that industrial crops (tobacco and cotton) jointly represent about 10% of all arable land. Further down the classification, we find citrus fruits and fruit trees jointly occupying about 4% of arable land, as well as potatoes and tomatoes, which together amount to about 3% of all arable land in the country.

TABLE 3. SHARE OF ARABLE LAND ALLOCATED TO EACH SELECTED CROP (NATIONAL LEVEL)

LAND PERCENTAGES (% OF TOTAL ARABLE LAND IN THE COUNTRY)	1964	1968	1972	1976	1980	AVERAGE
Wheat	34%	42%	36%	37%	28%	36%
Tobacco	4%	4%	3%	5%	2%	4%
Cotton	4%	5%	7%	6%	4%	5%
Potatoes	2%	2%	2%	3%	2%	2%
Tomatoes	1%	1%	1%	1%	1%	1%
Citrics	1%	2%	2%	2%	1%	2%
Fruit trees	1%	2%	2%	2%	2%	2%
Other trees	13%	19%	22%	24%	18%	19%

Source: Hellenic Statistical Authority, "Annual Agriculture Statistics."

Radical shifts do not seem to have taken place at the internal level either, i.e., within each category of agricultural products. Here, we use the same categories that appear in the official statistics. In the case of *Grains*, wheat retains its primacy for the entire 1964-1980 period, tying

up about 65% of the total area in that category. In the same period, *Other trees* represent about 78% of all areas under the *Tree crops* category, which is why we are presenting it along with the narrower *Fruit trees* from the same category. Potatoes represent about 64% of all *Cucurbits and tubers* areas, and beans about 55% of all *Edible legumes* areas. At lower levels, tobacco and cotton represent about 35% and 48%, respectively, of the total area under the category *Industrial plants*, while tomatoes occupy about 28% of the total area of the category *Vegetables and garden crops*.

Of particular interest are the divergences in the level of specialization of different districts with regard to specific crops (Maps 1 through 6). By ‘specialization’, we mean the percentage of total cultivated land within a district that is allocated to a crop. Central and northern Greece recorded the highest levels of specialization in the old crops: Macedonia and Aetolia-Acarmania in the case of tobacco, and Macedonia and Thessaly in the case of wheat. In contrast, for new crops such as tomatoes, potatoes, oranges and lemons, the highest levels of specialization appear in the southern and western regions of the country, especially in the Peloponnese and Epirus. It is worth noting that only lemons/oranges appear to have motivated a level of district specialization comparable to that of tobacco. Wheat appears as the most cultivated crop, with no other competing with it in terms of percentage of land dedicated to its cultivation by district. Cotton is the “odd one out” in the distinction between old and new crops. Like the old crops, it was concentrated in northern and central Greece. At the same time, we could consider it a new crop, given that the expansion of its production through state investment was

a stated goal in the agricultural development programs of this period.⁷

The decrease in acreage dedicated to old crops in absolute terms (Table 2) may reflect a significant closing of the gap that separated the areas reserved for old crops from those used for tree cultivation. By itself, however, such decrease falls short of confirming any radical restructuring of Greek agriculture. This finding is in line with the assessments made by a number of economic and rural historians.⁸ In fact, from year 1973 up until the accession of the country to the EEC, the areas allocated to old crops (tobacco and wheat) experience a new upturn. In particular, this comeback of the old crops can be observed in a number of areas of the Greek north: Grevena, Drama, Evros, Kastoria, Kilkis, Kozani, Pieria, Rodopi, Serres and Chalkidiki (Table 4). In other words, the new political, economic and social context after the fall of the Colonels' dictatorship, as well as the oil shocks of the 1970s, seem to have led to a certain reversal of the shift from the old to the new crops, at least as far as the northern regions of the country are concerned. Since tobacco and wheat production had received substantial support in the form of subsidies and state purchasing programs in prior decades, their revitalization can probably be explained by the turn towards redistributive economic policies under the Karamanlis governments (1974-1980).⁹

7. Ministry of Coordination, *Πενταετές Πρόγραμμα Οικονομικής Αναπτύξεως*, 30-31; Center of Planning and Economic Research, *Σχέδιον Προγράμματος Οικονομικής Αναπτύξεως*, 15-16.

8. Patronis and Liangovas, "Κοινωνική ενσωμάτωση και οικονομική πολιτική," 131-132; Panagiotopoulos, *Οι αγρότες στην ελληνική ιστορία*, 404; Chrysafis Iordanoglou (Χρυσάφης Ιορδάνογλου), *Η ελληνική οικονομία μετά το 1950*, vol. 1 (Athens: Τράπεζα της Ελλάδος, 2020), 230-231.

9. Vasilis Patronis (Βασίλης Πατρώνης), *Ελληνική Οικονομική Ιστορία: Οικονομία, Κοινωνία και Κράτος στην Ελλάδα (18ος-20ος αιώνας)* (Σύνδεσμος Ελληνικών Ακαδημαϊκών Βιβλιοθηκών, 2015), 203-228.

Evolution of the crop composition before EEC accession

Map 3. Average level of specialization in wheat by district (1964-1980)



Source: Hellenic Statistical Authority, "Annual Agriculture Statistics."

Map 4. Average level of specialization in tomatoes by district (1964-1980)



Source: Hellenic Statistical Authority, "Annual Agriculture Statistics."

Map 5. Average level of specialization in potatoes by district (1964–1980)



Source: Hellenic Statistical Authority, “Annual Agriculture Statistics.”

Map 6. Average level of specialization in oranges and lemons by district (1964–1980)



Source: Hellenic Statistical Authority, “Annual Agriculture Statistics.”

Evolution of the crop composition before EEC accession

TABLE 4. PERCENTAGE OF CULTIVATED LAND ALLOCATED TO TOBACCO AND WHEAT IN SELECTED NORTHERN GREEK DISTRICTS

	1965	1970	1973	1976	1980	1973-1980
National level	32.3%	24.2%	21.1%	23.2%	23.7%	+2.6%
Grevena	65%	55%	45%	57%	65%	+20%
Evros	53.9%	39.7%	42.1%	52.3%	52.8%	+10.7%
Drama	54%	36%	30%	35%	44%	+14%
Kastoria	53.6%	41.7%	43%	50.2%	57.9%	+14.9%
Kozani	61.1%	50.6%	44.1%	51.9%	56.8%	+12.7%
Kilkis	72.8%	65.1%	60.2%	65.7%	76.5%	+16.3%
Pieria	62.4%	55.4%	48.4%	53.6%	51.6%	+3.2%
Rhodope	53%	34%	38%	47%	52%	+14%
Serres	48.8%	38.9%	29.7%	31.8%	43.5%	+13.8%
Chalkidiki	58.5%	48.9%	42.1%	45.6%	50.1%	+8%

Source: Hellenic Statistical Authority, "Annual Agriculture Statistics."

The findings presented in this section indicate that there was a certain degree of adaptation in Greece's crop mix in the period under study, at least in terms of total acreage. Whether such adaptation was sufficient or satisfactory is a question that would require some form of benchmarking, and probably comparison with the trajectories of similar countries. Last, given the different crop mixes that one encounters in northern-central Greece on one hand, and in southern Greece on the other, one question seems worth posing: Did the same factors shape the degree of adaptation in both geographic areas? Or are different institutional or ecological forces determining land use in each of these two differentiated areas? In the third section of this chapter, we point at how the compatibility of crops with the technologies available at the time might take

us one step closer to an answer. But before turning to the issue of technological diffusion, let us turn to the differing patterns in terms of production volumes.

CHANGES IN PRODUCTION VOLUMES

There were significant increases in the new and irrigated crops included in our sample (Table 5). The data that we present here allow us to conclude that crop mix adaptation took place, to some extent, at the level of intra-crop varieties. Some varieties of the same crop are better suited for non-irrigated agriculture because of their resilience to water scarcity. Others are a better fit for irrigated environments in that they respond to more water with higher yields, without the farmer having to worry as much about the scarcity of water. In fact, the statistical datasets that we have used distinguish between, for instance, irrigated and non-irrigated tomatoes. The same applies to tobacco, cotton and other crops. We do observe an increase in irrigated varieties at the expense of the non-irrigated.

More specifically, irrigated tomatoes and irrigated tobacco show the largest increases in their production volumes during the period 1964-1980, recording important increases of 270% and 119%, respectively. At the same time, the production volume of potatoes increased by 99%, while significant increases were recorded in the production volumes of oranges (+72%), irrigated cotton (+72%), durum wheat (+65%), and non-irrigated tomatoes (+48%). Furthermore, both the production volumes for soft wheat (+36%) and those for lemons (+29%) presented increases. Only two of the “traditional” dry crops recorded a drop in production volumes; namely, those of non-irrigated cotton

Evolution of the crop composition before EEC accession

(-82%) and non-irrigated tobacco (-51%). If we think of the shift from non-irrigated to irrigated varieties within a crop as a form of adaptation to technology that was becoming more easily accessible at this time, then it would be necessary to nuance pessimist claims about the supposed inability of Greek agriculture to adapt its crop mix over time.

TABLE 5. AMOUNTS PRODUCED IN THOUSANDS OF TONS
(NATIONAL LEVEL)

AMOUNTS PRODUCED (THOUSANDS OF TONS)	1964	1968	1972	1976	1980	CHANGE (%)
Wheat (soft)	1,679	1,242	1,144	1,956	2,290	+36%
Wheat (durum)	413	327	324	418	680	+65%
Tobacco (irrigated)	31	29	40	68	68	+119%
Tobacco (non-irrigated)	102	61	46	73	50	-51%
Cotton (irrigated)	202	215	381	316	346	+71%
Cotton (non-irrigated)	62	13	14	13	11	-82%
Potatoes	544	603	715	1,015	1,082	+99%
Tomatoes (irrigated)	409	641	937	1,020	1,514	+270%
Tomatoes (non-irrigated)	27	21	30	22	40	+48%
Lemons	140	95	151	180	181	+29%
Oranges	380	438	508	577	653	+72%

Source: Hellenic Statistical Authority, "Annual Agriculture Statistics."

Not surprisingly given the patterns of land use that we discussed in the previous section, the old crops as well as cotton show the highest level of concentration in their production volume in parts of central and northern Greece (Maps 11-13). For cotton, three geographical points of high concentration of production (>10%) appear, correspond-

Evolution of the crop composition before EEC accession

Map 9. Average concentration of the production volume for wheat (1964-1980)



Source: Hellenic Statistical Authority, "Annual Agriculture Statistics."

Map 10. Average concentration of the production volume for tomatoes (1964-1980)



Source: Hellenic Statistical Authority, "Annual Agriculture Statistics."

Map 11. Average concentration of the production volume for potato (1964-1980)



Source: Hellenic Statistical Authority, "Annual Agriculture Statistics."

Map 12. Average concentration of the production volume for oranges (1964-1980)



Source: Hellenic Statistical Authority, "Annual Agriculture Statistics."

Evolution of the crop composition before EEC accession

Map 13. Average concentration of the production volume for lemons (1964-1980)



Source: Hellenic Statistical Authority, "Annual Agriculture Statistics."

ing to areas of Thessaly and Macedonia, cumulatively representing about 50% of the total production of the crop. The Thessalian district of Karditsa contributed the highest amount of cotton in the period under study (over 20% of total). In the case of tobacco, 3 points of high concentration of production (>10%) are again identified, this time in areas of Western Greece and Macedonia, making up about 40% of the total production together. In contrast to the two highly concentrated crops, wheat has a much lower concentration of its production volume, recording only one geographical pole of "high concentration" in the district of Larissa (Thessaly), with about 13% of the total production of the crop. At the same time, there were many areas with

considerable wheat output in almost all central and northern regions of the country. We can, therefore, speak of a highly dispersed product.

Most new crops show the highest concentration of their production in the southern regions of the country. There is an interesting difference in their degrees of concentration, though. Tomatoes and potatoes were characterized by the presence of only one geographical pole of relatively high concentration of production in the western Peloponnesian district of Elis, an area where about 14% of the total production of the products was concentrated (Maps 10-11). A much higher degree of concentration is evident in the case of orange and lemon production, with the areas of high concentration of production (>20%) in the Peloponnese and Epirus, which together make up over 50% of the production of these crops (Maps 12-13). In the case of oranges, the two main districts are Arta and Argolis, while in the case of lemons, they are Achaea and Corinthia.

The uneven patterns of geographic distribution described above raise the question of what causes them. We have tested the hypothesis that there might be some common responses to similar factors in the case groups of crops forming our sample. Table 6 offers some empirical evidence of possible relationships of complementarity within these groups. More specifically, some positive and statistically significant correlations were identified between the districts' degrees of specialization in tobacco and wheat (+0.29). In other words, the higher percentage of a district's total cultivated land is dedicated to growing tobacco, the more land will be used for wheat production. At the same time, a positive and statistically significant relationship emerged between wheat and cotton (+0.14). There were also positive, statistically significant correla-

Evolution of the crop composition before EEC accession

tions between potato and tomato production (+0.26), as well as between tomatoes and oranges/lemons (+0.16). In exactly the opposite way, some “competitive” relationships are found between the degrees of land concentration for potatoes and tobacco (-0.24), potatoes and wheat (-0.33) and potatoes and cotton (-0.33). In other words, a district with a high specialization in potato production is less likely to grow tobacco. Negative and statistically significant relationships were also found between the degrees of concentration of areas for citrics and wheat (-0.33), as well as between those for tomatoes and wheat (-0.24).

TABLE 6. CORRELATION COEFFICIENTS BETWEEN THE DEGREES OF CONCENTRATION OF LAND CULTIVATED WITH DIFFERENT CROPS (DISTRICT LEVEL)

	Tobacco	Cotton	Wheat	Tomatoes	Potatoes	Oranges & lemons
Tobacco		+0.08*	+0.29*	-0.09*	-0.24*	-0.09*
Cotton			+0.14*	-0.05	-0.33*	-0.09*
Wheat				-0.24*	-0.33*	-0.33*
Tomatoes					+0.26*	+0.16*
Potatoes						-0.01
Oranges & lemons						

* statistical significance at level of 99%.

Source: Authors' calculations based on Hellenic Statistical Authority, "Annual Agriculture Statistics."

These patterns allow us to speak of relations of complementarity and competitiveness between some of the crops in our sample. Crops that match together are likely

to benefit from the endowments, whether ecological, institutional or technological, present in a district. Conversely, a crop that “competes” with another crop will probably not benefit (i.e., be chosen by the same farmer or a nearby one) from the same endowments. For most pairs of crops, these relationships do not just hold when we look at land allocation, but also to the share of a district in the total production volume of crops at the national level (Table 7). There are, however, some mismatches.

Once again, positive and statistically significant relationships exist between the degrees of concentration of the production volumes for the three agricultural products belonging to the group of the two old crops (tobacco and wheat), as well as cotton. At the same time, positive and statistically significant correlations appear between products belonging to the group of new crops. More specifically, we observe complementarity between tomatoes and potatoes, as well as between lemons and oranges.

In contrast, relationships of “competitiveness” exist between the degrees of concentration of the production volume of the old crops and cotton on the one hand, and oranges and lemons on the other. There are some unexpected results with regard to the relationship between wheat on the one hand, and tomatoes and potatoes on the other. While the correlation between the percentage of a district’s land used for wheat production is negatively correlated to the percentage used for tomato or potato production, the amount of wheat produced in one district as a percentage of the national output is positively correlated to the tomatoes and potatoes produced in the same district. Why this is the case is an interesting question. If these two relationships of opposite signs exist at the same time, it is because tomatoes and potatoes might grow more efficiently per unit

Evolution of the crop composition before EEC accession

TABLE 7. CORRELATION COEFFICIENTS BETWEEN THE DEGREES OF CONCENTRATION OF THE PRODUCTION VOLUMES FOR DIFFERENT CROPS (DISTRICT LEVEL)

	Tobacco	Cotton	Wheat	Tomatoes	Potatoes	Oranges	Lemons
Tobacco		+0.30***	+0.39***	+0.20***	-0.05*	-0.07**	-0.10***
Cotton			+0.51***	+0.14***	+0.07	-0.10***	-0.13***
Wheat				+0.21***	+0.18***	-0.19***	-0.15***
Tomatoes					+0.55***	-0.02	+0.05
Potatoes						-0.05	+0.24***
Oranges							+0.14***
Lemons							

*** statistical significance at level of 99%

** statistical significance at level of 95%

* statistical significance at level of 90%

Source: Authors' calculations based on Hellenic Statistical Authority, "Annual Agriculture Statistics."

of land in the areas that allocate more acreage to wheat. It is then somewhat puzzling that less acreage might be dedicated to their production. Further research is necessary to explain this apparent contradiction.

ADOPTION OF NEW TECHNOLOGIES

We observe a remarkable increase in the availability of agricultural machinery in Greece in the period under study (Table 8).¹⁰ Sprinklers become eight times more numerous between 1965 and 1980, while agricultural tractors and automatic sprayers increased by about three times and one and a half times, respectively. Significant increases were also recorded by all types of pumps. The only exception was the dusting apparatus, which experienced a decrease in its availability by 18%.

The positive contribution of the country's technological modernization to the growth of the production volume of Greek agriculture in the pre-accession period is also visible in the results presented in Table 9. More specifically, for the old crops in our sample as well as cotton, positive and statistically significant correlations appeared between their production volumes and the number of sprinklers, diesel-powered pumps, tractors and mechanical sprinklers that were present in a district. For tomatoes and potatoes, positive and

10. For a discussion of the state-led investment in agricultural technology and land improvement in this period, see Panos Kazakos (Πάνος Καζάκος), *Ανάμεσα σε κράτος και αγορά: οικονομία και οικονομική πολιτική στη μεταπολεμική Ελλάδα, 1944-2000*, 7th ed. (Athens: Πατάκης, 2007), 218-219; Also Kostas Kostis (Κώστας Κωστής), *Ο Πλούτος της Ελλάδας: η ελληνική οικονομία από τους Βαλκανικούς πολέμους μέχρι σήμερα* (Athens: Πατάκης, 2019), 396.

Evolution of the crop composition before EEC accession

TABLE 8. PRESENCE OF TECHNOLOGICAL EQUIPMENT
IN THE AGRICULTURAL SECTOR (NATIONAL LEVEL)

NUMBER OF MACHINES	1965	1970	1975	1980	CHANGE (%)
Sprinklers	12,807	48,984	83,430	114,572	+795%
Diesel pumps	-	77,933 (2)	86,722	93,815	+20%
Gasoline pumps	-	74,500 (2)	81,894	83,016	+11%
Pumps (other)	20,457	34,985	52,046	74,179	+263%
Pumps (other)	-	12,128 (2)	14,397	13,541	+12%
Tractors (total)	48,859	102,290	152,789	221,862	+354%
Tractors (small)	17,567	40,360	59,448	81,584	+364%
Sprayers	44,349 (1)	94,632	88,433	104,812	+136%
Dusters	-	17,842 (2)	17,184	14,627	-18%

(1) values for year 1966, (2) values for year 1971

Source: Hellenic Statistical Authority, "Annual Agriculture Statistics."

statistically significant connections were recorded between their production volumes and the availability of agricultural machinery in almost all cases examined. For oranges, positive and statistically significant relationships were found only between their production volume and the number of electric pumps. For lemons, positive and statistically significant relationships were found between their production levels and the number of electric pumps, tractors and dusters. However, some significant variations were identified between machines in the intensity of the correlation coefficients. Thus, sprinklers showed more pronounced positive connections with arable crops than with vegetables, while small tractors seemed to respond better to the needs of the new crops than to those of the old ones. Sprayers were found to be more strongly associated with tobacco production,

TABLE 9. CORRELATION COEFFICIENTS BETWEEN THE AVAILABILITY OF TECHNOLOGICAL EQUIPMENT AND THE PRODUCTION VOLUMES FOR DIFFERENT CROPS (DISTRICT LEVEL)

	tobacco	cotton	wheat	tomatoes	potatoes	oranges	lemons
Sprinklers	+0.46***	+0.80***	+0.56***	+0.32***	+0.20***	-0.03	-0.02
Diesel pumps	+0.41***	+0.83***	+0.53***	+0.36***	+0.21***	-0.01	-0.06
Gasoline pumps	0	-0.10**	-0.06	+0.33***	+0.33***	-0.14***	-0.08
Electric pumps	0	+0.21***	+0.18***	+0.32***	+0.36***	+0.34***	+0.30***
Pumps (other)	-0.07	-0.05	-0.10**	-0.01	+0.08*	-0.07	-0.07
Tractors (total)	+0.27***	+0.27***	+0.35***	+0.44***	+0.37***	-0.03	+0.30***
Tractors (small)	-0.15***	-0.12***	-0.16***	+0.13***	+0.24***	-0.04	+0.38***
Mechanical sprayers	+0.59***	+0.16***	+0.25***	+0.48***	+0.24***	0	+0.38***
Dusters	+0.25***	-0.03	+0.02	+0.20***	+0.24***	0	+0.53***

*** statistical significance at level of 99%

** statistical significance at level of 95%

* statistical significance at level of 90%

Source: Authors' calculations based on Hellenic Statistical Authority, "Annual Agriculture Statistics."

while dusters were more strongly associated with lemon production. Although indirectly, the possible relationship of complementarity between groups of crops represented in our sample emerges once again, and in fact might be in part explained by technological affinities. Tobacco, cotton and wheat seem to have largely shared common technologies, while the same seems to have been true in the case of tomatoes and potatoes. None of the negative correlations that we have identified between the availability of agricultural machines and specific crops are statistically significant.

EMIGRATION

Despite the progress of technological modernization of the Greek rural countryside after WWII, the contribution of the labor factor remained particularly decisive in determining output volumes. The data indicate that the waves of emigration to foreign countries had a negative, statistically significant correlation to the growth of the production volume of Greek agriculture during the period 1965-1977 in the case of most crops contained in our sample (Table 10). Whenever the correlation is positive, it is not statistically significant. In simpler terms, the more people left a district to emigrate overseas, the less agricultural production increased in that district, although it still remains to be seen which one of the two phenomena caused the other. This correlation applies regardless of whether migration was recorded as permanent or temporary. Here, we should clarify that we have operationalized the levels of emigration as the percentage of departures relative to the total population of each district. We have only taken into account emigration overseas, not within the country.

TABLE 10. LINEAR CORRELATION COEFFICIENTS BETWEEN THE PRODUCTION VOLUME OF SELECTED CROPS AND EMIGRATION OVERSEAS FROM GREECE, 1965-1977 (DISTRICT LEVEL)

	tobacco	cotton	wheat	tomatoes	potatoes	oranges	lemons
emigration (total)	-0.13***	-0.20***	-0.21***	-0.20***	-0.19***	-0.12***	-0.17***
emigration (permanent)	+0.07*	-0.07**	+0.01	-0.16***	-0.12***	-0.06	-0.13***
emigration (temporary)	-0.22***	-0.18***	-0.27***	-0.12***	-0.14***	-0.10**	-0.11**

*** statistical significance at level of 99%
 ** statistical significance at level of 95%
 * statistical significance at level of 90%

Source: Authors' calculations based on Hellenic Statistical Authority, "Annual Agriculture Statistics", as well as Hellenic Statistical Authority, "Statistical Yearbook of Greece."

Evolution of the crop composition before EEC accession

In order to further examine the possible existence of a causal link between emigration on the one hand and the levels of agricultural production volumes on the other, we conducted Granger causality tests. They revealed the following: There were two one-way, statistically significant causal links between tobacco production and the levels of external migration in Greece, with a direction of movement from the volume of production of the crop P to the levels of external migration E (Table 11). When we make the distinction between irrigated and non-irrigated varieties, the data appear to support the view that the fall in the production volume of non-irrigated tobacco was a factor contributing to significant waves of emigration overseas (Table 12). A similar phenomenon appears to exist in the case of the relationship between non-irrigated cotton and emigration, although the direction of causality is the opposite. In contrast to the case of non-irrigated tobacco, for non-irrigated cotton we found that emigration overseas contributed to the long-term reduction in the volume of production. This difference is interesting, as the direction of causality seems to be different for two crops considered to be quite labor intensive, and which appear to share a relationship of complementarity. Two statistically significant causal connections also appeared between wheat production volumes and external migration, albeit bidirectional (Table 11). In every other case examined, no statistically significant causal link was found between external migration on the one hand, and the production volume of the crops on the other.

In conclusion, based on our statistical analysis, a negative sign emerges in the relationship that linked external migration to production volumes in the agricultural sector, although the intensity of this relationship seems to vary

TABLE 11. EXAMINATION OF THE DIRECTION OF THE CAUSAL CORRELATIONS BETWEEN AGRICULTURAL PRODUCTION AND EMIGRATION OVERSEAS FROM GREECE, 1965-1977 (DISTRICT LEVEL)

	tobacco	cotton	wheat	tomatoes	potatoes	oranges	lemons
emigration (total)	YES	NO	YES	NO	NO	NO	NO
direction:	P → E		Two-way				
emigration (permanent)	YES	NO	YES	NO	NO	NO	NO
direction:	P → E		Two-way				
emigration (temporary)	NO	NO	NO	NO	NO	NO	NO

Source: Authors' calculations based on Hellenic Statistical Authority, "Annual Agriculture Statistics," as well as Hellenic Statistical Authority, "Statistical Yearbook of Greece."

TABLE 12. EXAMINATION OF THE DIRECTION OF THE CAUSAL CORRELATIONS BETWEEN AGRICULTURAL PRODUCTION (DISTINGUISHING BETWEEN IRRIGATED AND NON-IRRIGATED) AND EMIGRATION OVERSEAS FROM GREECE, 1965-1977 (DISTRICT LEVEL)

	tobacco (irr.)	tobacco (non-irr.)	cotton (irr.)	cotton (non-irr.)	tomatoes (irr.)	tomatoes (non-irr.)
emigration (total)	NO	YES	NO	YES	NO	NO
direction:		$P \rightarrow E$		$E \rightarrow P$		
emigration (perm.)	NO	YES	NO	YES	NO	NO
direction:		$P \rightarrow E$		$E \rightarrow P$		
emigration (temp.)	NO	NO	NO	NO	NO	NO

Source: Authors' calculations based on Hellenic Statistical Authority, "Annual Agriculture Statistics", as well as Hellenic Statistical Authority, "Statistical Yearbook of Greece."

from product to product, and depending on the type of migration (total, permanent or temporary).

Last, our findings demonstrate strongly negative and statistically significant connections between technological modernization and the levels of external migration (Table 13). In other words, the districts where more agricultural technology was available were also the districts that fewer people left as a percentage of their total population. These indications allow us to question the view that it was the removal of surplus labor through emigration that prompted the technological modernization of the Greek countryside in the second half of the twentieth century.¹¹ A reasonable interpretation of these figures is that the areas where more technology was available offered their inhabitants more opportunities for employment.

CONCLUSIONS

The empirical findings of this study confirm two claims made in existing literature. The first is that technological modernization of Greek agriculture in the second half of the twentieth century led to an increase in the output levels. The second is that this increase did not overturn the dominant dynamics in the existing crop mix. In this context, the present study highlights the limited shift of Greek agriculture from the crops considered old or traditional, to the so-called new ones, i.e., fruit trees and vegetables considered to have potential for export-driven growth.

Apart from the closing of the gap that separated the old from the new crops, the study offers us rich indications

11. Petmezas, "The Modernisation of Agriculture in Greece."

TABLE 13. CORRELATION COEFFICIENTS BETWEEN TECHNOLOGICAL MODERNIZATION AND EXTERNAL EMIGRATION
(PROVINCIAL LEVEL)

	sprinklers	Diesel pumps	gasoline pumps	electric pumps	pumps (other)	tractors (total)	tractors (small)	mechanical sprayers	dusters
emigration (total)	-0.23***	-0.24***	-0.03	-0.26***	-0.06	-0.32***	-0.15***	-0.19***	-0.19***
emigration (perm.)	-0.11***	-0.07	-0.18***	-0.31***	-0.10*	-0.25***	-0.20***	+0.04	-0.05
emigration (temp.)	-0.19***	-0.22***	+0.03	-0.08**	-0.02	-0.20***	-0.02	-0.25***	-0.18***

*** statistical significance at level of 99%
 ** statistical significance at level of 95%
 * statistical significance at level of 90%

Source: Authors' calculations based on Hellenic Statistical Authority, "Annual Agriculture Statistics," as well as Hellenic Statistical Authority, "Statistical Yearbook of Greece."

for the existence of a clear distribution of agricultural production in postwar Greece, with a clear geographical component. Thus, the old arable crops (wheat and tobacco), as well as cotton, were found to be concentrated in the northern and central regions of the country (Macedonia and Thessaly). In contrast, a set of new crops consisting of fruit trees and vegetables were mainly concentrated in the southern regions of the country (the Peloponnese). Alongside this division, it seems that a series of complementarity relationships between groups of products emerged. As reflected in the present study, several cases were found where the existence of a greater concentration of the production volume and the areas of one crop was related to the greater concentration of one, or more, of the other crops. Such a situation characterized both the group of tobacco, cotton and wheat, as well as the vegetable and garden crops (i.e., tomatoes and potatoes), and citrics (oranges and lemons). It was noticeable at the district level.

With virtually no exceptions, and despite the geographical variations identified, our findings confirm the view that the entry of new technologies in Greek rural areas led to an increase in the volume of production of Greek agricultural products, both in the case of the old and the new crops. They were largely found to respond with particular flexibility to the conditions created by the influx of new technologies, especially thanks to the possibility of converting former dry lands into irrigated ones. In this way, the producers of these crops managed to achieve increased yields and productivity. In most cases, the production of all the crops contained in the sample were found to be related positively and statistically significantly to the availability of a number of agricultural technologies that entered Greek agriculture in large amounts from the 1950s onward.

Despite the adoption of new technologies, the human factor (labor) remained important. Our findings indicate a negative, statistically significant relationship between the levels of external emigration and the growth of agricultural production volumes in Greece. In fact, in some cases this relationship also emerges as a one-way causal effect, as in the case of non-irrigated tobacco, with a direction from the fall in the volume of production to the subsequent increase in emigration flows to foreign countries. Finally, the findings of this study demonstrate a negative, statistically significant relationship between the levels of external emigration and those of technological modernization, thus calling into question previous findings of the relevant literature which proposed that migration waves contributed to the impetus of the technological modernization of the countryside.

With this study, we hope to have contributed to the historiography of commodities by demonstrating how statistical correlations can, at the very least, point at areas for further inquiry. The relationships of complementarity and competitiveness between commodities, as well as those between technology or emigration on the one hand, and the production levels of commodities on the other, might prompt us to approach qualitative historical sources under a new light. At the same time, carrying out statistical analyses at the level of specific crops (i.e., agricultural commodities) allows economists and quantitative historians to take into account the traits that are specific to different crops, and avoid some of the pitfalls inherent in approaching the real world from too high a level of abstraction. This might be a way to start bridging the gap between qualitative historians and data-based disciplines.

PART V

TOBACCO, SUPPLY CHAINS
AND PRODUCTION NETWORKS
IN SOUTHEASTERN EUROPE

Tobacco and the Social Lives of Credit – Global Credit Markets and the Supply Chain of Oriental Tobacco

Kaleb Herman Adney

INTRODUCTION

This chapter presents the history of tobacco in the late Ottoman Balkans and some of the processes that facilitated its profitability on international markets during the late nineteenth and early twentieth centuries. Tobacco was one of the most important and profitable industries in the Ottoman Empire and in its successor states of Turkey, Egypt, Greece, and Bulgaria. As such, it occupies an important place within the national histories of each of these countries and contributed significantly to their

social hierarchies.¹ The ways that Ottoman tobacco was instilled with value through labor processes have been explored in other histories and elsewhere in my own research.² Instead, the focus of this chapter is on the relationship of credit markets and financial instruments to the extraction of value within the supply chain of tobacco. The instrumentalization of credit as a means of extracting value and profiteering within the tobacco trade offers some insights into how we might more broadly conceptualize

1. Donald Quataert, *Social Disintegration and Popular Resistance in the Ottoman Empire, 1881-1908: Reaction to European Economic Penetration* (New York: New York University Press, 1983), 13-40; Ebru Boyar, "Public Good and Private Exploitation: Criticism of the Tobacco Régie in 1909" in *Oriente Moderno* 25 (86), no. 1 (2006), 193-200; Juan Carmo-na-Zabala, *State Expansion and Economic Integration: A Transnational History of Oriental Tobacco in Greece and Germany (1880-1941)* (University of San Diego: Unpublished Dissertation, 2018); Mary Neuburger, *Balkan Smoke: Tobacco and the Making of Modern Bulgaria* (Ithaca and London: Cornell University Press, 2013); Rellie Shechter, *Smoking, Culture, and Economy in the Middle East: The Egyptian Tobacco Market, 1850-2000* (London and New York: I.B. Tauris, 2006).

2. Filiz Dıġıroġlu, "Selanik Ekonomisinde Unutulmuş Bir Alan: Tütün Üretimi, Ticareti ve Reji (1883-1912)," in *Osmanlı Arařtırmaları/The Journal of Ottoman Studies*, XLIII (2014), 227-272; Filiz Dıġıroġlu, *Memalik-i Osmaniye Duhanları Müřterekü'l-Menfaa Reji Őirketi: Trabzon Reji İdaresi, 1883-1914* (İstanbul: Osmanlı Bankası Arřiv ve Arařtırma Merkezi, 2007); Can Nacar, *Labor and Power in the Late Ottoman Empire: Tobacco Workers, Managers, and the State (1872-1912)* (Cham, Switzerland: Palgrave Macmillan, 2019); Can Nacar, "Labor Activism and the State in the Ottoman Tobacco Industry," in *International Journal of Middle East Studies*, vol. 46, no.3 (2014): 533-551; Can Nacar, "The Régie Monopoly and Tobacco Workers in Late Ottoman Istanbul," in *Comparative Studies of South Asia, Africa and the Middle East* 34, no.1 (2014): 206-219; Can Nacar, "Tütün İşçileri, Tüccarlar ve Kırık Camlar: 1905 Kavala Grevi," in *Toplumsal Tarih*, 213 (2011), 38-42; Gila Hadar, "Jewish Tobacco Workers in Salonika: Gender and Family in the Context of Social and Ethnic Strife," in Amila Buturovic and İrvin Cemil Schick, eds., *Women in the Ottoman Balkans: Gender, Culture and History* (London: I.B. Tauris, 2007), 127-152; İsmail Arslan "19. Yüzyılda Balkanlar'da Bir Liman Őehri: Kavala," in *History Studies* 2, no. 3 (2010): 25-38.

credit and its relationship to the value creation process. Within the tobacco trade, money was circulated and exchanged via financial instruments such as bills of exchange and deposits, or advance payments, usually provided at a discount to the creditor.³ As credit was facilitated by these instruments and profits were made on the international market by those with access to major financial networks, it is worth considering the extent to which credit created, facilitated, or diverted value within the industry as a whole. Here, I argue that domination of credit markets and the strategic use of advance payments to cultivators allowed for commercial elites in Europe, the Ottoman domains, and the United States to extract both kinds of value from the tobacco trade. As a result, the credit markets of the southern Balkans were tied to the broader political economy and finance itself was a politicized sector. Debt dependency in the countryside was experienced locally in seasonally specific credit arrangements that reflected the dominance of the urban financial and commercial apparatus by elite Ottoman subjects with connections to western and central European commodity markets.

Histories of commodities — ranging from cotton and coal to potatoes and porcelain — have highlighted the unique characteristics of specific raw goods to support bold claims about their supposed role in changing the world.⁴ Value creation tends to occupy a secondary place within

3. Similar processes can be found throughout the Middle East and Europe during the same time period. For an in-depth study on the relationship between social hierarchies and credit markets in the context of Ottoman Palestine, see Beshara Doumani, *Rediscovering Palestine: Merchants and Peasants in Jabal Nablus, 1700-1900* (Berkeley and Los Angeles: University of California Press, 1995), 54-181.

4. Bruce Robbins, "Commodity Histories," in *PMLA*, Vol. 120, No. 2 (Mar., 2005), 454-463.

these analyses and, as a result, market value is often presented as an inherent trait, rather than the result of social processes and cultural values.⁵ However, analyses of “the commodity” as a historically, and therefore socially, contingent category have been an important aspect of the commodity-chain literature since its inception.⁶ Political economy being shaped by social relations and labor being central to the creation of value, historians of commodities are especially well-positioned to present the history of social differentiation and the various issues of identity which have accompanied this process over time.⁷ This edited

5. Aaron Jakes and Ahmad Shokr, “Review Essay: Finding Value in *Empire of Cotton*” in *Critical Historical Studies* (Spring 2017), 107-136.

6. Terence Hopkins and Immanuel Wallerstein, “Commodity Chains in the World Economy Prior to 1800,” in *Review* 10, no. 1 (1986): 157-70; Sven Beckert et al., “Commodity Frontiers and the Transformation of the Global Countryside: A Research Agenda,” in *Journal of Global History* 16, no. 3 (November 2021): 435-50; Reşat Kasaba, *The Ottoman Empire and the World Economy: The Nineteenth Century* (Albany NY: State University of New York Press, 1988); Giovanni Federico, *Feeding the World: An Economic History of Agriculture, 1800-2000* (Princeton: Princeton University Press, 2008); Jeffrey G. Williamson, *Trade and Poverty: When the Third World Fell Behind* (Cambridge, Mass.: MIT Press, 2011). For a critique of dependency theory in the context of Middle East studies, see Michael O’Sullivan and Kaleb Herman Adney, “Commercial Society in the Middle East (c. 1869-1945): Time, Space, and Political Economy,” forthcoming in the *Oxford Research Encyclopedia of Asian History* (Oxford University Press).

7. Andreas Kosmas Lyberatos, “The Nation in the Balkan Village: National Politicization in Mid-Nineteenth-Century Ottoman Thrace,” *Turkish Historical Review*, 7:2 (Oct. 2016) 167-93; Ramazan Hakkı Öztan, “Tools of Revolution: Global Military Surplus, Arms Dealers and Smugglers in the Late Ottoman Balkans, 1878-1908,” in *Past & Present*, Volume 237, Issue 1, 1 November 2017, 167-195; Robert Crews, “Trafficking in Evil? The Global Arms Trade and the Politics of Disorder,” James L. Gelvin and Nile Green, eds., *Global Muslims in the Age of Steam and Print* (Berkeley, Los Angeles, and London: University of California Press, 2014), 121-142.

volume provides numerous examples of how commodity historians can shed light on questions of value creation within global supply chains. Because commodity histories have more recently sidelined the question of value creation, however, secondary issues such as the relationship between non-productive wealth and surplus value are even less commonly explored. With this in mind, the present chapter analyzes the financial markets and some credit mechanisms in Macedonia and Thrace, which were central to the social hierarchy of the region's business culture, in order to make sense of this relationship.

To the extent that historians and social scientists agree on surplus value as something created through productive labor processes, there is less consensus about the boundaries of value and its abstraction through various financial instruments, transportation, and market networks. As labor instills raw goods with value by means of processing and manufacturing, those goods transform into assets in the sense that they are stores of value which, upon exchange in the market, become commodities. Of interest, then, are the various stages of this process and the opportunities provided therein to negotiate the value of labor and the good itself. This takes three common forms: first, there is the creation of surplus value which, as mentioned above, is tied to labor itself. Second, the good, following the various steps involved in its processing or manufacturing, becomes a store of value (i.e., an asset). In more colloquial terms, the good is then 'worth something.' The discrepancy between the good's monetary value as an asset and the compensation given to those who were involved in its manufacturing or processing (usually as a money wage) is often understood according to the Marxian paradigm of surplus value. In other words, the asset holds more value than the

amount given in compensation. This surplus value is only realized, however, in a third transition from an asset to a commodity. At this point the good in question transfers surplus value into the coffers of the merchant or financier who has sold it.⁸

In some ways, these stages correspond to the functions of money itself as a measure of value, a means of exchange, and a store of value, respectively. However, the primary type of credit within the tobacco trade of the Ottoman Balkans was promissory credit in general and advance payments made on future crops in particular. This corresponds to the third function of money – “money as money” – in Marxian monetary theory, which Costas Lapavistas describes as indicative of “money’s ability to distance itself from the narrow exchange of commodities and confront the latter as a social force.”⁹ In the Ottoman tobacco trade, credit certainly functioned as a social force and had a profound influence over the social relations between peasants, workers, and merchants. In addition, the region was relatively cash poor and remained limited in its capacity for creating wealth, especially amongst the peasantry. Although agriculture was the most important sector in the region, commerce and banking remained the primary means of accumulating capital amongst the most prominent merchants of Salonica into the period of Greek rule.¹⁰ This al-

8. Karl Marx, *Capital: A Critique of Political Economy, Volume One* (London: Penguin Books 1976), 125-240.

9. Costas Lapavistas, “The Theory of Credit Money: A Structural Analysis,” in *Science and Society*, Vol. 55, No. 3 (Fall 1991), 294.

10. Paris Papamichos Chronakis, “De-Judaizing a Class, Hellenizing a City: Jewish Merchants and the Future of Salonica in Greek Public Discourse, 1913-1914,” in *Jewish History*, Vol. 28, No. 3/4 (2014), 373-403; Costas Lapavistas and Pinar Cakiroglu, *Capitalism in the Ottoman Bal-*

lowed for pre-established financial networks in the region and their major international counterparts to fill a need for credit and to create a path for further capital accumulation through advance loans that allowed tobacco to be purchased at a discounted rate. Furthermore, when paid late, these loans bore interest, creating even more potential for such commercial elites to accumulate capital by means of extracting surplus value. From this preliminary presentation of credit dynamics in the tobacco trade, it should be obvious that this chapter does not purport that credit *created* value in the same way that labor did in the tobacco fields of Macedonia and Thrace. At the same time, by manipulating the terms of agreement in the local context of credit supply, creditors increased the exchange value of tobacco on the international market, thereby maximizing their profits in the process.

This strategy was complicated by the declaration of Ottoman bankruptcy in 1875 and the subsequent establishment of a domestic tobacco monopoly. However, it was never upended completely. In 1881, the Ottoman Public Debt Administration (OPDA) was established as a means of ensuring that the Ottoman government repay its massive debts to foreign creditors in Europe that had been steadily rising since the Crimean War of 1853-1856 with the Russian Empire. Tobacco revenues were incorporated into this apparatus but in 1883 the OPDA opted to hire out their administration of them to a third party. *La Société de la Régie cointéressée des Tabacs de l'Empire Ottoman*, or the Régie Company as it was more commonly known, which was formed with German, Austrian, and Anglo-

kans: Industrialisation and Modernity in Macedonia (London and New York: I.B. Tauris, 2019), 77-106.

French financial backing, bid for and won this contract, which gave it the sole right to collect tobacco revenues on tobacco produced and sold within the Ottoman Empire for the next thirty years. In addition to its role as the revenue collector in the Ottoman tobacco trade, the Régie Company also provided credit to cultivators and placed restrictions on tobacco transportation and sales in order to curb smuggling, which became a massive enterprise during the late nineteenth century.¹¹ In spite of the Régie's provision of credit, however, other means of lending continued to play a significant role within the industry and the amount of credit provided by the Régie Company was hardly sufficient to meet demand as the industry expanded. This fed social tensions in the region and fueled popular dissatisfaction with the Régie.¹²

Although theories of contemporary finance capitalism have, to some degree, grappled with the role of non-productive wealth in the supply chain — namely the various markets for stocks, commodities, options, and currencies — there remain relatively few in-depth studies that analyze the historical process by which value is abstracted along

11. *Règlement sur les droits et devoirs des cultivateurs et des débitants envers la régie et sur les dispositions pénales: texte turc-français* (Constantinople: Typographie et lithographie du Journal 'La Turquie', 1886), 1-16.

12. Murat Birdal, *The Political Economy of Ottoman Public Debt: Insolvency and European Control in the Late Nineteenth Century* (New York: I.B. Tauris, 2010), 17-62; Ali Coşkun Tünçer, *Sovereign Debt and International Financial Control: The Middle East and the Balkans, 1870-1914* (London: Palgrave Macmillan, 2015), 1-28 and 53-78; *Drama Tütüncü Kongresi Mukarreratı* [*Proceedings of the Drama Tobacco Merchants' Conference*] (İstanbul: Ahmed İhsan ve Şürekası Matbaacılık Osmanlı Şirketi, 1326 [1910]); *Kavala tütün kongresi: tütün meselesi hakkında itti-haz edilen mukarrerat* [*Kavala Tobacco Congress: Proceedings that deal with the issue of tobacco*] (Salonica: Yeni Asır Matbaası, 1327 [1909]).

the supply chain through credit and commodity markets in particular.¹³ Tobacco in the late nineteenth-century and early twentieth-century Eastern Mediterranean provides some insights on this point, given that much of the productive labor which instilled raw tobacco with value was invisible from the ships that transported it and from the shops in Trieste, Vienna, Istanbul, and London where it was sold, not to mention more distant markets such as those in Tokyo, Kingston, and New York.¹⁴ In like manner, the processes by which tobacco was transported and marketed abroad were largely abstracted to the peasants and workers of major tobacco exporting towns, such as Kavala, Vathy, Samsun, and Alexandria or rural zones, such as those of Drama, İskeçe (Gr. Xanthi) and Siroz (Gr. Serres). In addition, the credit markets which supplied peasants and small-scale merchants with much-needed capital for cultivation, purchasing, and industrialization efforts were integrated within the same market networks as those responsible for exporting tobacco. The financial networks which enabled merchants to purchase tobacco in Macedonia, Thrace, and throughout the Aegean region al-

13. David Harvey, *Spaces of Capital: Towards a Critical Geography* (New York: Routledge, 2001), 312-411; Benjamin Lee and Edward LiPuma, "Cultures of Circulation: The Imaginations of Modernity," in *Public Culture* 14(1): 191-213

14. Chrysoula Anagnostopoulou, "'Βιομηχανία σιγαρέττων εν Σάμω': Όψεις της επιχειρηματικότητας του καπνεμπορικού οίκου των αδελφών Μ. και Σ. Καραθανάση στη Σάμο (1887-1916) ['Cigarette Industry in Samos': Aspects of Entrepreneurship of M. and S. Karathanassis Brothers Tobacco Company (1887-1916)]" in *Πρακτικά 1ου Επιστημονικού Συνεδρίου: Ο καπνός στην ιστορία: οικονομικές, κοινωνικές και πολιτισμικές προσεγγίσεις – Καβάλα, 7-9 Δεκεμβρίου 2018* [*Proceedings of the 1st Academic Conference: Tobacco in History: Economic, Social, and Cultural Approaches – Kavala, 7-9 December 2018*] (Kavala: Institute of Social Movements and the History of Tobacco, 2020), 225-237.

lowed tobacco companies to leverage markets and increase value, both before and after productive labor processes.

On the one hand, through the advanced purchase of a season's harvest, the peasant was often contracted at a discount, ultimately providing the merchant with a greater share of the surplus value at the season's end. On the other hand, the physical and metaphorical distance of the markets upon which tobacco was sold abroad gave these same merchants and financiers the ability to manipulate market dynamics there such that the final exchange value of their commodities was exaggerated further.

These processes reveal a number of social dynamics that complicate the notion of credit as a purely non-productive aspect of capital accumulation. Viewed through a strictly Marxian paradigm, it is true that credit does not create surplus value in the same way that labor does. However, as recent contributions to global history point out, things do not only take on economic value through their social utility, as argued by Arjun Appadurai in *The Social Life of Things*.¹⁵ In addition to the social interactions and the "cultural and historical milieus" which give opportunity for the value of a thing to be increased contextually, "global trajectories" also give commodities new opportunities to obtain meaning and value within new circumstances.¹⁶ Credit markets, especially with the globalization of banking in the nineteenth century, became implicated in the production

15. Arjun Appadurai, ed., "Introduction: Commodities and the Politics of Value," in *The Social Life of Things: Commodities in Cultural Perspective* (Cambridge: Cambridge University Press, 1988), 3-63.

16. Anne Gerritsen and Giorgio Riello, "Introduction: The Global Lives of Things: Material Culture in the First Global Age," in *The Global Lives of Things: The Material Culture of Connections in the Early Modern World* (London and New York: Routledge, 2016), 1-11.

and distribution of commodities through global networks. This implicit connection between credit and commodities in the era of global capitalism has hardly been explored for what it might reveal about the creation, manipulation, and distribution of value. Some examples taken from the late Ottoman Empire's tobacco industry, which are specifically based on commercial networks in Macedonia and Thrace that did business extensively throughout Europe, Anatolia, Egypt, and further afield in Asia and America, can potentially shed some light on this issue.

Ultimately, credit, transportation, and market networks did not instill commodities with value in the same way that labor processes did. However, these processes and the financial networks which facilitated them were still central to the transformation of resources and goods into global consumable commodities. Their role in maximizing surplus value and in creating discrepancies between the use-value of commodities and their exchange-value contributed significantly to social tensions within the international oriental tobacco trade. An anthropologist of China, Julie Chu, has helpfully framed credit in contemporary China as a "conceptual touchstone for exploring the calculative horizons of value production," which, by her estimates, is more precise and potentially more generative than "a notion like capitalism or capital."

Like Chu, I aim to "move beyond an examination of value production as accumulation, growth, or surplus" in order to consider ways that value was also socially conditioned and transformed through global financial networks and regional credit transactions.¹⁷ The Marxian conception of "money as

17. Julie Y. Chu, *Cosmologies of Credit: Transnational Mobility and the Politics of Destination in China* (Durham and London: Duke University Press, 2010), 7.

money,” mentioned above, emphasizes the ability of credit to “influence the articulation of exchange” and therefore to play a significant role in creating social differentiation between the agricultural and commercial sectors by maximizing the surplus value available to merchants and creditors.¹⁸ Considering these perspectives in tandem has the potential to further our understanding of the ways that financial institutions and other non-productive aspects of trade alter value, in spite of their inability to create surplus value independent of the labor process. In short, circulation of credit may be limited in its ability to create value but it is certainly an important means of manipulating and maximizing it within the context of global capitalism.

SURPLUS VALUE AND DEBT DEPENDENCY IN THE NINETEENTH CENTURY OTTOMAN TOBACCO TRADE

Commercial and political privileges facilitated the seizure of value by specific market networks in the context of the nineteenth-century Ottoman Empire. Tobacco, in particular, was one of the most profitable industries in the late Ottoman Empire and was a zone of competition amongst merchants and commercial elites who sought to maximize their profits within the agricultural sector more generally. Social scientists often present credit mechanisms as central to the dynamics of debt dependency in industries that are founded on labor in developing nations (both rural and industrial labor).¹⁹ The tobacco industry of the late Ottoman

18. Lapavistas, “The Theory of Credit Money,” 295.

19. Meine Pieter van Dijk and Jacques Trienekens, “Global Value Chains: An Overview of the Issues and Concepts,” in Meine Pieter van Dijk and

Empire offers an interesting case for comparative analysis, as it was an industry that grew out of a dual credit system, its growth being funded both by institutional lending from banks and other corporate bodies and by non-institutional lending amongst merchants themselves.²⁰ Non-institutional lending provided a means by which tobacco merchants could avoid some of the pitfalls of institutional lending and debt dependency well into the twentieth century, in spite of the fact that it came with its own unique risks. Debt dependency was especially problematic for peasants who took on advanced loans for tobacco cultivation, even in cases when that debt was interest-free or bore only limited interest, as studies of the Régie Company have demonstrated.²¹ However, other institutional lenders

Jacques Trienekens, eds., *Global Value Chains: Linking Local Producers from Developing Countries to International Markets* (Amsterdam: Amsterdam University Press, 2012), 9-30.

20. Here, I employ the term 'institutional' to refer specifically to corporate bodies, especially banks, on the one hand, while 'non-institutional' refers to other forms of credit traded between merchants, usually on an individual basis. Although the terms 'corporate' and 'individual' would be more or less suitable here as well, I avoid them so as not to imply that this chapter deals with the corporation as a concept and phenomenon, which it does not. Likewise, the terminology of institutional and non-institutional credit has some purchase within Ottoman studies in spite of its imperfections. For useful discussion of these ideas, see Stefania Ecchia, "Informal rural credit markets and interlinked transactions in the district of late Ottoman Haifa, 1890-1915," *Financial History Review* 21.1 (2014), 5-24; İrfan Kokdaş, "Land Ownership, Tax Farming and the Social Structure of Local Credit Market in the Ottoman Balkans, 1685-1855," in *Financial History Review* 24.1 (2017), 53-81; Svetla Ianeva, "The Commercial Practices and Protoindustrial Activities of Hacı Hristo Rachkov, a Bulgarian Trader at the End of the Eighteenth to the Beginning of the Nineteenth Century," in *Oriente Moderno* 25 (86), no. 1, (2006): 77-91.

21. Dıġıroġlu, "Selanik Ekonomisinde Unutulmuş Bir Alan," 227-272; Nacar, *Labor and Power*; Nacar, "Labor Activism and the State," 533-551; Nacar, "Tütün İşçileri, Tüccarlar ve Kırık Camlar," 38-42.

played an important role in capturing value within the tobacco industry through the provision of advance purchase of tobacco via contract/deposit (Tr. *pey* or *depozito*; alternatively Fr. *avance*). Credit markets, as a result, were central to the hierarchical nature of the business culture in Kavala and the surrounding region during the late nineteenth and early twentieth centuries.

Both the credit markets and the commercial networks which operated in Macedonia and Thrace went through major transformations in the nineteenth century as a result of the political and economic modernization projects of the Ottoman legal and political reforms, known to Ottoman scholars as the *Tanzimat*.²² Likewise, integration into the global commercial and financial system changed the business dynamics within Salonica, Kavala, and the cities and villages that supplied them with raw goods.²³ Recent financial and economic histories have also shown that “informal” credit dominated much of the economic landscape in the early nineteenth century as shown through legal, bureaucratic, and financial registers.²⁴ However, by the

22. Safa Saraçoğlu, *Nineteenth-Century Local Governance in Ottoman Bulgaria: Politics in Provincial Councils* (Edinburgh: Edinburgh University Press, 2018), 14-43.

23. Kasaba, *The Ottoman Empire and the World Economy*; Şevket Pamuk, *The Ottoman Empire and European Capitalism, 1820-1913: Trade, Investment, and Production* (Cambridge and London: Cambridge University Press, 1987), 55-81; Donald Quataert, *Ottoman Manufacturing in the Age of the Industrial Revolution* (Cambridge: Cambridge University Press, 1993).

24. Kokdaş, “Land Ownership, Tax Farming and the Social Structure,” 53-81; Elena Frangakis-Syrett, “Market Networks and Ottoman-European Commerce, C. 1700-1825,” in *Oriente Moderno*, Nuova Serie, Anno 25 (86), No. 1 (2006), 122-127; Edhem Eldem, “French Trade and Commercial Policy in the Levant in the Eighteenth Century,” in *Oriente Moderno*, Nuova Serie, Anno 18 (79), No. 1 (1999), 27-47.

end of the nineteenth century, the dynamics of the credit market in Salonica and Kavala had changed in significant ways. Local and regional credit had become decidedly more integrated with a global supply of capital and, in particular, with the financial markets of Austro-Hungary, Germany, France, and the British Empire.²⁵ At the same time, the credit mechanisms which facilitated trade within the southern Balkans, such as promissory notes and agricultural advances, did not disappear. Instead, these methods were actively regulated by an advancing Ottoman commercial legal system which gave institutional creditors the means to demand repayment of unpaid debts in an increasingly efficient manner.²⁶

As the regional credit market became increasingly integrated with European markets, the legal framework for conducting business in the southern Balkans was going through its own transformation. Bills of exchange and promissory notes, although not new to the region, were central to changing mercantile relations. Already by the eighteenth century, these instruments had facilitated the transfer of resources and finances both across long distances and within the bounded local context. Istanbul-based

25. Tuncer, *Sovereign Debt and International Financial Control*; Kasaba, *The Ottoman Empire and the World Economy*; Şevket Pamuk, *Uneven Centuries: Economic Development of Turkey Since 1820* (Princeton: Princeton University Press, 2019); André Autheman, *The Imperial Ottoman Bank* (Istanbul: Ottoman Bank Archives and Research Centre, 2002); John Karatzoglou, *The Imperial Ottoman Bank in Salonica, The First 25 Years: 1864-1890* (Istanbul: Ottoman Bank Archives and Research Centre, 2003).

26. This is true for other parts of the empire, as well. Nora Barakat, "Underwriting the Empire: Nizamiye Courts, Tax Farming and the Public Debt Administration in Ottoman Syria," in *Islamic Law and Society* 26 (2019), 374-404.

French merchants, in particular, had been able to transfer surplus value accumulated through the exchange of goods into financial instruments to be traded on local markets — thus increasingly pursuing “*commerce de banque*” in the financial sector rather than operating exclusively in the real sector.²⁷ As in eighteenth-century Istanbul, nineteenth-century Macedonia was home to a credit market wherein negotiable financial instruments were not merely monetary assets but merchants also treated them as both means of exchange and stores of value. As such, they could absorb surplus value and, therefore, turn a profit within the right circumstances. Regionally, bills of exchange were so common that entire volumes of the Salonica commercial court registers during the last third of the nineteenth century were dedicated to recording the contours of each agreement made between merchants over bills of exchange. With the establishment of commercial courts throughout the empire; the publication of the commercial code in 1850; the subsequent appendix of 1860; and the 1861 code of procedure, the Ottoman government made a concerted effort to standardize the legal processes that accompanied disputed bills of exchange.²⁸

The establishment of the Régie Company introduced new lines of credit amongst tobacco merchants and cultivators alike. Although other credit arrangements did not collapse overnight, the role of the Régie as a creditor to cultivators became increasingly important over the following

27. Edhem Eldem, *French Trade in Istanbul in the Eighteenth Century*, (Leiden, Boston, and Köln: Brill, 1999); Eldem, “French Trade and Commercial Policy,” 41.

28. Avi Rubin, *Ottoman Nizamiye Courts: Law and Modernity* (New York: Palgrave Macmillan, 2011), 73-78.

three decades. By the end of Ottoman rule in the Balkans, however, most merchants complained that it restricted commercial enterprise and many peasants were vocally suggesting alternative paths forward, which would provide support for agricultural production in general and more substantial lines of credit in particular.²⁹ Over the three decades of its operations in the Balkans, Régie control remained limited, given that most of the trade in Kavala and its hinterlands remained export-oriented and export merchants were theoretically protected from anything but minimal interference for export duties and inspections on the Régie's behalf. Domestic tobacco sales, in contrast, were strictly controlled by the Régie administration.³⁰ This limited the company's ability to seize and control the value of tobacco headed towards European markets to the north. Instead, tobacco profits in Macedonia and Thrace were more readily exploited by a few elite firms that obtained privileges to bypass Régie restrictions after 1884. This was the case for the two most prominent exporters of tobacco to the Austro-Hungarian domains – namely, the Allatinis and the Herzogs – who operated without the same restrictions as other local merchants in the region. In response to this system of favoritism within the local political economy, other merchants and cultivators resorted to subterfuge and an unofficial secondary credit market to make a profit.³¹

29. *Drama Tütüncü Kongresi Mukarreratı*.

30. *Règlement sur les droits*, 1-16.

31. Quataert, *Social Disintegration and Popular Resistance*, 13-40; Kaleb Herman Adney, "Institutional Finance, Interconnected Markets, and Trans-Regional Networks: The Political Economy of Ottoman Tobacco in Macedonia and Thrace (c. 1880-1900) — Kurumsal maliye, birbirine bağlı piyasalar ve bölgeler arası ticaret şebekeleri: Makedonya ve Trakya'daki Osmanlı tütününün ekonomi politikası (1880-1900)" forthcoming in Fehmi

According to Louis Rambert, the director of the Régie in 1909, the Régie had always dealt with suppliers of the Austro-Hungarian monopoly, in this manner keeping with the special relationship between the two empires dating back to the company's inception. In keeping with this approach, the Régie had granted the Oriental Tobacco Trading Company — a Hungarian Jewish company known more commonly as the Herzog Company according to the eponym of its founder — and the Commercial Company of Salonica Ltd. the unique privilege to transport their tobacco directly to their own warehouses in 1890 and 1895, respectively. Even prior to the establishment of the latter, the Allatini Brothers, its primary shareholders, were granted special privileges to continue supplying the Austro-Hungarian monopoly unhindered, as they had done before the Régie's establishment. Other merchants, by contrast, were required to take their tobacco to Régie storehouses for inspection and for the collection of export fees. According to Rambert, after the initial negotiations between the Ottoman Public Debt Administration and the Sublime Porte in 1882 about the specifications of Régie Company operations in the empire, the Ambassador of Austria-Hungary formally decried certain aspects of the Régie agreement, based on the Austro-Ottoman Treaty of Commerce.³²

Yılmaz, ed., *Mehmet Genç Anısına Uluslararası Osmanlı İktisat Tarihi Sempozyumu* (Güngören Belediyesi, 2022); Dıġıroġlu, "Selanik Ekonomisinde Unutulmuş Bir Alan," 227-272; Nacar, *Labor and Power*; Mustafa Batman, *Tobacco Smuggling in the Black Sea Region of the Ottoman Empire, 1883-1914* (Istanbul: Libra, 2016).

32. Louis Rambert, *Rapport du Directeur Général sur la séance de la Chambre des Députés du 7/20 Février 1909* (Galata: Imprimerie Gérard Frères, 1909), 29-44.

By 1893 the Banque de Salonique, the financial entity predominantly owned and operated by the Allatini family, had come to an official agreement with the Régie Company to act as one of its tobacco suppliers while simultaneously exporting higher quality tobacco abroad. Although the bank's headquarters were in Istanbul and it was incorporated as a *société anonyme* there in 1888, it operated throughout the Balkans and the Levant with branches in Salonica, Monastir, Kavalla, Izmir, Skopje, Edirne, Beirut, Alexandroupoli, Drama, Samsun, and Xanthi. Its financial apparatus, however, was decidedly European, given that the Comptoir d'Escompte (Paris), la Banque Impériale et Royale Privilégiée des Pays Autrichiens (Vienna), la Banque des Pays Hongrois (Budapest), and the Allatini Brothers (Salonica) were its founding partners. The bank, however, would pass its agreement with the Régie Company on to another Allatini subsidiary, the Commercial Company of Salonica Ltd. in 1895.³³

This company, founded by Lazaro Allatini, a prominent Jewish businessman in Salonica, was incorporated in London to export tobacco from the southern Balkans into central and western Europe with the full financial benefit of the London stock exchange.³⁴ Perhaps the decision to incorporate in London can also be seen as an attempt by Lazaro Allatini to diversify beyond the Ottoman, French, and Austrian financial markets where he and the Allatini Brothers already enjoyed access, especially given that to-

33. E. Pech, *Manuel des Sociétés Anonymes fonctionnant en Turquie* (Constantinople: Gérard Frères, 1911), 250-252.

34. Evangelos Hekimoglou, *The "Immortal" Allatini: Ancestors and Relatives of Noemie Allatini-Bloch (1860-1928)* (Thessaloniki: Jewish Museum of Thessaloniki, 2012), 24.

bacco had by then become a staple in American and British markets. In any case, it is not an exaggeration to state that the Commercial Company was the most important tobacco exporter in and around Kavala in the late nineteenth and early twentieth century. It was the primary supplier of the Austro-Hungarian tobacco monopoly, which received much of its leaf tobacco via Austrian Lloyd Company ships that departed from Kavala. In 1895 alone, this sea route accounted for roughly 44% of goods exported from Kavala, most of which was tobacco.³⁵ According to Louis Rambert, as part of the Régie Company and the Ottoman government's longstanding agreement with the Austrian government, the Régie never interfered with suppliers of the Austro-Hungarian tobacco monopoly, as the Ottoman and Austrian governments had agreed to in 1883.³⁶

At the same time that the Banque de Salonique and the Commercial Company of Salonica were making major advances within the tobacco trade, the Régie Company itself tried to consolidate and re-orient its aspirations. Although the company's monopoly rights were limited to the domestic market, the Régie Company was still active in exporting its higher quality tobaccos abroad. Its export ventures never found the success the company had hoped for, however, given the extensive commercial networks which already controlled most of the major trade routes into central Europe to the North and Egypt to the South. The fact that many of these networks would be considered "smuggling" networks after the Régie's establishment in 1883

35. J.E. Blunt, *Diplomatic and Consular Reports on Trade and Finance. Turkey. Report for the Year 1895 on the Trade of the Salonica Consular District., Annual Series No. 1837.* (London: 1897), 9-12.

36. Rambert, *Rapport du Directeur Général*, 29-44.

made it difficult for the Régie to break into this market as a competitor in any normal sense of the term. Given the limitations on the Régie's ability to enter the export market, the company stopped exporting tobacco altogether in 1893 and formed a separate corporation, confusingly called the Turkish Régie Export Company. Charles Morawitz, in his 1902 account of Ottoman finances and business trends, discusses the Turkish Régie Export Company's obligation to pay the Régie Company annually, starting at 4,000 Ottoman lira and increasing gradually to 10,000 Ottoman lira by its fifth year.³⁷ However, the company did not achieve its expected profits and by 1899 had ceased operations completely.³⁸

The merchants who dominated the tobacco trade were able to do so because of three other key advantages they had over other local and regional merchants. First, they had diverse portfolios which allowed them to invest in ventures that were more speculative and risky for upstart merchants or those with less capital. These diverse portfolios included access to market networks in the Ottoman domains but also throughout Europe, especially the Austro-Hungarian domains. Second, and related to the latter, tobacco merchants with significant access to market networks, both in the tobacco-producing regions and amongst consumer countries within central Europe, enjoyed key political privileges that gave them a competitive edge over other merchants. Other

37. Charles Morawitz, *Les finances de la Turquie* (Paris: Guillaumin et cie, 1902), 294.

38. Société de la Régie Co-Intéressée des Tabacs de l'Empire Ottoman, *Rapport du Conseil d'Administration a l'Assemblée Générale Ordinaire du 1899* (Constantinople: Typographie et Lithographie J. Pallamary, 1899), 7.

local merchants also enjoyed significant political privileges and maintained close ties with European consulates in Kavala and Salonica. However, notable success within the tobacco industry was not based on European privileges in general but on specific exceptions made to the policies of the domestic tobacco monopoly – the Régie Company – which favored Austro-Hungarian commercial networks in particular. Third, the merchants who dominated the tobacco industry in Kavala, Salonica, and the surrounding towns and villages were well integrated into the credit markets of Europe and the Ottoman Empire, acting as creditors for entrepreneurs operating at varying capacities. All three of these factors allowed the predominantly Jewish commercial elite of Salonica and their subsidiaries in Kavala, Drama, and İskeçe (Gr. Xanthi) to increase their hold over the tobacco industry, in spite of increased competition and restrictions imposed on merchants and cultivators alike by the Régie Company after its establishment in 1883.³⁹

Prior to the establishment of the Banque de l’Orient in 1904, an elite group of Jewish and *Dönme* merchants in Salonica facilitated many of the credit transactions that were crucial within the tobacco industry. They did so by creating their own institutional avenues for accessing credit markets in central and western Europe, while also strategically funneling that credit into promising ventures within the tobacco industry of the southern Balkans. At the same time, thanks to strategic partnerships with the Ottoman Bank and the Régie Company, these merchants were often able to avoid the pitfalls that befell other mer-

39. Adney, “Institutional Finance, Interconnected Markets, and Trans-Regional Networks.”

chants.⁴⁰ Furthermore, even with the establishment of the Banque de l'Orient in the twentieth century, the dynamics of countryside debt dependency in the tobacco zones of the southern Balkans remained functionally similar to its nineteenth-century dynamic.

As is well known amongst financial historians of the Balkans and the Ottoman Empire, the Imperial Ottoman Bank and the Banque de Salonique were both deeply invested in the tobacco industry of the Macedonian and Thracian provinces of the Ottoman Empire. Each of these financial entities, however, played slightly different roles within the regional political economy. The reputation of the former tends to overshadow that of the latter, especially since the Ottoman Bank was a shareholder in the Régie Company. Equally significant, however, is the role of the Banque de Salonique in facilitating the credit transactions necessary for tobacco purchases by the most prominent tobacco merchants in Kavala and abroad. To what extent the Banque de Salonique made advanced payments to cultivators and provided cash for auction on new harvests is unclear, but it is likely that the bank conducted these sorts of transactions from 1888 until after the fall of the empire. The Commercial Company of Salonica Ltd., one of the most important and long-standing export firms of the late Ottoman and post-Ottoman period, would take on much of the Banque de Salonique's responsibilities in this

40. For example, Mr. Alfred Loir, the chief accountant of the Ottoman Bank beginning in 1872 and branch director beginning in 1879, was a founding member of *Le Cercle de Salonique* along with Hugo Allatini, the son of the tobacco merchant Solomon Allatini. Loir was also an honorary administrator of the Banque de Salonique after its establishment in 1888, demonstrating strategic overlap in Salonica's financial networks. Karatzoglou, *The Imperial Ottoman Bank in Salonica*, 1-10 and 20-21.

capacity after the former's incorporation in 1895. It would continue providing advances to peasants and cash offers at new-harvest auctions even during the 1923-1925 population exchange and thereafter.⁴¹

From a preliminary analysis of data available in the Ottoman commercial court records, it is clear that the two aforementioned banks, the Ottoman Bank and the Banque de Salonique, issued more loans to merchants than any other entities. From the court's extant notices of missed payment (*protesto defterleri*), the Ottoman Bank emerges as the most active complainant against its debtors. For example, from the petitions filed for unpaid debts in the Ottoman commercial court (*protestos*) between 25 June 1891 and 8 September 1891, the Ottoman Bank accounted for 25.7% of the complaints filed for unpaid debts. Banque de Salonique, for its part, accounted for 22.8% of these complaints filed against debtors during the same period of time. This three-month period seems to represent a general trend — these entities accounted for a sizable portion of the total credit lent out to merchants in the city of Salonica. It is crucial to understand the outsized role these entities played within the regional credit market in general, since tobacco was part of the same financial ecosystem. Unfortunately, the use case of the unpaid credit that these lenders officially protested is not information that is readily available within the register, making it difficult to quantify the total percentage of unpaid loans which were actually intended as direct investments in tobacco production in the countryside.⁴²

41. Kaleb Herman Adney, "The Political Economy of Ethnic Cleansing: Commercial Speculation in the Greek-Turkish Population Exchange" (under review).

42. Ιστορικό Αρχείο Μακεδονίας (Historical Archive of Macedonia, hereafter IAM), Εμπροδοκείο Θεσσαλονίκης (Selânik Ticaret Mahkemesi/Com-

Brick-and-mortar institutions which provided loans for tobacco merchants and cultivators were few in number during the nineteenth century. It is clear that there were major issues with accessing credit from institutional lenders such as the Régie Company, the Ottoman Bank, or the Banque de Salonique in the period before the turn of the century. This created a discrepancy between the robust real sector and the relatively feeble financial sector available to many local tobacco merchants and cultivators. Bills of exchange (Tr. *poliçe*; It. *polizza*) and personal contracts (*mukavele* names and *seneds*) were crucial for the enterprising efforts of tobacco merchants in Kavala and the surrounding region. However, their ad-hoc nature and the decentralized manner in which merchants traded them made unpaid debt a major source of legal conflict, as numerous documents from the Ottoman commercial court of Salonica suggest. As shown so far, the establishment of the Régie Company in 1883 as the domestic monopoly holder over tobacco production and sales introduced new opportunities for both merchants and cultivators to obtain credit. This credit, however, was also integrated into “black-market” networks in unexpected ways that reveal some of the difficulties with institutional credit and the limitations inherent in its control mechanisms.⁴³ An increased demand for credit with the expansion of the tobacco trade by the turn of the century, however, caused merchants and peas-

mercial Court of Selânik, hereafter STM), *Protesto Defterleri* 1888-1891, Δ20.3.3, Case Nos. 46-82, (25 June 1891 - 8 September 1891), 364-400.

43. See, for example, IAM, STM Δ20.2.8, Case No. 67, 3 Ağustos 1301 (15 August 1885), 35-37 in which a Régie purchasing agent in Drama is charged with trading Régie credit as a commodity in its own right to make a profit from the financial mechanisms at his disposal.

ant-cultivators to rely on other sources of credit, such as the Banque de l'Orient after 1905.

More importantly for the purposes of this chapter, money lending was central to two important stages in the annual production of tobacco well into the twentieth century. On the one hand, merchants in towns such as Drama, Siroz, Cuma-i Bala, İskeçe, and elsewhere relied on banks and patrons in Salonica and Kavala to provide them with credit prior to the season of loose-leaf tobacco auctioning, which took place in the spring.⁴⁴ This provided them with the means of building up an inventory for shipment abroad later in the year. A number of documents from archival collections from the Banque de l'Orient on commercial activities of the tobacco merchants Kyros Anastassiou and Elias Eliades attest to this dynamic.⁴⁵ Such entrepreneurial credit caused the relationship between creditors in Salonica and their merchant-clients in the towns of Macedonia and Thrace to revolve around debt and obligation. Nevertheless, these relations could also take on a more collaborative tone, as they did in the relationship between merchants who operated as purchasing agents and the firms they contracted with or were employed by.⁴⁶ Proceedings from the Drama Tobacco Merchants'

44. Referred to in the *Drama Tütüncü Kongresi Mukarreratı* as "açık tütün." *Drama Tütüncü Kongresi Mukarreratı*, 29-30.

45. For example, in November 1911 Kyros Anastassiou appealed to representatives from the bank to lend him 400 Ottoman lira ahead of the tobacco auction to take place in the following April. See IAM, Τράπεζα Ανατολής AEE: TRAP, Folder No. 258, Group Code. 128; page 2: 30 November 1911.

46. Personal correspondence between Judah and Shemtov Perahia in their capacity as the representatives of the Commercial Company in Xanthi and Drama during the Greek-Turkish population exchange attests to bidding wars over the price of loose-leaf tobacco at auctions of this sort. See for example, Shemtov Perahia (Drama) to Commercial Co. (Salonica),

Congress, an event hosted by the Committee for Union and Progress shortly after its seizure of political power in the Ottoman Empire to debate new plans for the economic development of the southern Balkans, make it clear that the auction was a significant social institution each spring.⁴⁷

On the other hand, debt dependency was also crucial to the relationship between merchants of all types and the peasants who contracted with them over future harvests. This relationship was reflective of a second set of transactions over tobacco harvests which took place separately from loose-leaf auctions, for which purchasing agents and independent merchants borrowed from banks and patrons in the regional commercial centers. Contracted tobacco (Tr. *peyli tütün*), in contrast, was priced in accordance with its projected value at a discounted rate to the merchant. The merchant, in turn, lent money to the contracted cultivators (Tr. *peylemiş*), whose livelihood depended on ready access to cash prior to the planting season. The disputes over tobacco pricing which enveloped Kavala, Drama, and İskeçe at the beginning of the twentieth century and broke out into massive unrest amongst tobacco cultivators and workers alike were caused by disagreements about the quality of the tobacco which had been contracted from previous seasons in this manner.⁴⁸

The Régie Company itself also gained a larger market share of tobacco, at least for a time, through its strategy

6 April 1923, folder 7, box 8, Judah Perahia Collection, Ben Zvi Institute; Shemtov Perahia (Drama) to Commercial Co. (Salonica); 14 April 1923, folder 7, box 8, Judah Perahia Collection, Ben Zvi Institute.

47. *Drama Tütüncü Kongresi Mukarreratı*, 29-30.

48. *Drama Tütüncü Kongresi Mukarreratı*, 32-35; Nacar, "Labor Activism and the State," 539-545.

of providing advance loans to peasants, theoretically at a 0% interest rate. This was, however, fraught with difficulty and disputes arose over the Régie's implementation of this policy. Furthermore, advance loans from the Régie disallowed cultivators from selling their tobacco to other exporters without proof that the monies borrowed had been paid back, a policy which was massively unpopular, given that this technically prevented them from selling their tobacco at auctions for potentially higher rates.⁴⁹ Perhaps this stipulation accounts for the high percentage of Régie loans that were paid back in a timely manner — in 1892-1893, for example, the Régie paid 240,762.45 Ottoman Lira in advance loans to cultivators in the empire and debtors repaid 231,712.19 LT to the Régie from that total. This equates to just over a 96% repayment rate of the advance loans made to peasants during those years.⁵⁰ In any case, by the so-called Second Constitutional Era (1908-1912), following the rise to power of the Committee for Union and Progress (referred to in shorthand as the 1908 Young Turk Revolution), the level of credit provided by the Régie had long been inadequate for the massive growth of the tobacco industry over the previous two and a half decades. This discrepancy was likely a major incentive for cultivators to enter into debt-dependent relations with merchants in order to continue growing tobacco, given that it was enjoying its highest profits yet at that time.

Although credit was significant to the social relations of the region, the surplus value available to merchants was not

49. *Règlement sur les droits*, 9.

50. Société de la Régie Co-Intéressée des Tabacs de l'Empire Ottoman, *Rapport du Conseil d'Administration à l'Assemblée Générale Ordinaire du 17/29 Août 1894* (Constantinople: Typographie et Lithographie J. Palamary, 1894), 12.

solely determined by credit relations. For example, a 1904 letter written by Konstantinos Vulgarides, the son of Petros Vulgarides who was the local representative for the French consul in Kavala during the last quarter of the nineteenth century, shows clearly that the value of tobacco was also tied to factors beyond the credit market.⁵¹ In it, he complains of an abundance of tobacco on the market from the previous two seasons thanks to over-planting. Because of this, he argued, merchants were not selling at the same rate as in previous years.⁵² Although peasants and workers in İskeçe (Gr. Xanthi) and Kavala interpreted this as an excuse on the part of merchants to purchase tobacco at lower prices than they had previously, an excess of stock tobacco certainly had an effect on the final price it would fetch in foreign markets.⁵³ Between 1898 and 1903, for example, the price of tobacco purchased by the Régie Company itself was on average 25.97 piastres per kilogram, which was nearly an 18% drop from the average 31.55 piastres paid between 1893 and 1898.⁵⁴ Although the Régie tried to maintain this lower price point even after prices started to rise again in foreign markets, the original

51. Βασίλης Ριτζαλέος, “Η υποθεσηή του εβραίου πραγματογνώμονα καπνών Ραζών: Συκοφαντία αίματος και διαχείριση κρίσεων στην Καβάλα του 1894,” in *Χρονικά: Έκδοση του Κεντρικού Ισραηλιτικού Συμβουλίου της Ελλάδος*, No. 213 (January-February 2008), 18-25; Χριστίνα Βάρδα, *Στα ίχνη της οικογένειας Βάρδα*, (Athens: Unpublished Manuscript, 2011), 63 and 77; Ioannis Vizikas, *Καβάλα, η Μέκκα του καπνού: Τόμος Β' – Καβάλα 1900-2000 αιώνα, οι άνθρωποι του καπνού*, (Kavala: Institute of Social Movements and the History of Tobacco, 2010), 37 and 67-69.

52. Constantinou Bulgarides, “Lettre de Cavalla” in *Revue Commerciale du Levant, Bulletin Mensuel de la Chambre de Commerce Française de Constantinople XVIIe Année*, 31 Mars 1904, No. 204 (Constantinople: Imprimerie Française, 1904), 427-428.

53. Nacar, “Labor Activism and the State,” 539-545.

54. Pech, *Manuel des Sociétés Anonymes*, 32.

depression in prices was a direct response to a drop in the company's net income from over 352,000 Ottoman Lira to just under 64,000 Ottoman Lira in the years between 1894 and 1899.⁵⁵

By the turn of the century, the apparent cooperation between the Régie Company, the Commercial Company, and the Herzog Company, as well as the limited access to credit amongst cultivators, became major sources of frustration in the countryside. In November 1900, for example, the Muslim community of Drama complained to the Grand Vizierate in Istanbul that these three entities — the Régie, the Commercial Co., and the Herzog Co. — had cooperated to offer disadvantageous lending terms to cultivators.⁵⁶ Such nefarious collaboration is not demonstrable in the historical record but these companies certainly controlled many of the vectors that determined pricing in the tobacco trade. This control gave the impression of corruption. It may have been for related reasons that the Banque de l'Orient gained significant traction as another bank of choice amongst tobacco merchants, especially Greek merchants, in the towns and villages which supplied Kavala after 1904.⁵⁷ By 1910 and 1911, the apparent domination of the credit market and the tobacco supply chain by the Commercial Company of Salonica Ltd., the Herzog Company, and the Régie Company would result in a num-

55. *Pech*, 34.

56. BOA, DH.MKT, 18 October 1900, No. 65, Group Code: 2429, 1.

57. Correspondence between Elias Eliades and Hasan Akif, among others, signifies that the Banque de l'Orient gained traction in the tobacco trade after 1904. See, for example, IAM, Τράπεζα Ανατολής, Folder No. 116, Group Code 329, pages 34 and 35: 6/19 September 1908 and 4/17 September 1908.

ber of complaints filed against all three parties. It also became the basis for a movement to disallow the Régie from obtaining a renewal of its thirty-year concession, which was set to expire in 1912. This movement, which organized conferences in Drama and in Kavala, was organized with support from Macedonian and Thracian representatives of the Committee of Union and Progress.⁵⁸

These efforts would have some concrete results, such as an increase in the amount of loans provided to cultivators by the Ottoman Empire's agricultural bank (*Ziraat Bankası*).⁵⁹ However, the Balkan Wars and World War I would bring many of these discussions to a rapid halt in the context of Macedonia and Thrace, which would enter into a protracted set of wars lasting for the better part of a decade. In post-Ottoman Turkey and in Greece, however, many of these discussions would take on a new form during and after the population exchange of 1923-1924. Ultimately, in northern Greece, the activities of the Refugee Settlement Commission between 1923 and 1930 and the Agricultural Bank of Greece after 1930 would change the dynamics of trade and credit in ways that merchants and cultivators had advocated for already before the Balkan Wars.⁶⁰ However, even in the 1930s, agricultural loans were limited in their

58. *Drama Tütüncü Kongresi Mukarreratı*, 10-12; *Kavala tütün kongresi: tütün meselesi hakkında ittihaz edilen mukarrerat* [*Kavala Tobacco Congress: Proceedings that deal with the issue of tobacco*] (Salonica: Yeni Asır Matbaası, 1327 [1909]), 1.

59. BOA, BEO 25 March 1912, No. 301437, Group Code: 4020, 1-2. Diğiroğlu, "Selanik Ekonomisinde Unutulmuş Bir Alan," 241.

60. Raymondos Alvanos, *Σλαβόφωνοι και Πρόσφυγες: Κράτος και πολιτικές ταυτότητες στη Μακεδονία του μεσοπολέμου* [*Slavic Speakers and Refugees: State and Political Identities in Macedonia During the Interwar Period*] (Επίκεντρο: Αθήνα, 2019), 49-54.

capacity to transform the standard of living amongst the peasantry.⁶¹ In Turkey, the experience of uneven development within the tobacco industry led Hüseyin Hüsnü, the previous Turkish representative of the Mixed Commission for the League of Nations in Kavala, and others to challenge the monopoly system and advocate for state protection of Turkish merchants' interests.⁶² At the same time, the tobacco industry in both countries would become a forum for Communist and Socialist activism after the exchange, leading to sustained labor movements in Izmir, Istanbul, and Kavala for decades to come.⁶³

CONCLUSION

Value-chain analysis, in its best incarnations, has provided a deeper understanding of the ways that social relations have been embodied in the processes of value creation and the redistribution of surplus value. From the scholarship on “the social life of things” to more recent histories of value in global trade, historians have shown that merchants negotiate for larger shares of surplus value, both at

61. Juan Carmona-Zabala, “Underfunded Modernization: Tobacco Producers and Agricultural Policy in Interwar Greece,” in *Journal of Modern Greek Studies*, Volume 39, No. 1 (May 2021), 196-204.

62. Kavalalı İbrahim Paşazade Hüseyin Hüsnü, *Tütün meselemiz: inhisarların iddialarına cevap* (Amedi matbaası: İstanbul, Teşrin-i Sani 1340 [October 1924]).

63. Mustafa Özçelik, *1930-1950 arasında tütüncülerin tarihi* (TÜSTAV: İstanbul, 2003); Zehra Kosova, *Ben işçiyim* (TÜSTAV: İstanbul, 1996). Ioannis Vizikas, *Χρονικό των εργατικών αγώνων* (Kavala: Municipal Museum of Kavala, 1994); Ioannis B. Ioannides, *Το καπνικό στην Καβάλα: μαρτυρίες και στοιχεία από το καπνεμπόριο και την καπνεργασία* (Kavala: Municipality of Kavala, 1998).

the level of purchases, as well as on the markets to which they redistribute those goods. The examples I have provided above from the tobacco trade of the southern Balkans during Ottoman times contribute to that scholarship by emphasizing the centrality of credit mechanisms to the seizure of value by independent merchants and tobacco-exporting firms. However, other aspects of Ottoman tobacco raise new questions and provoke a reconsideration of the relationship between credit and value within this historical context. For example, the existence of a 'shadow economy' for credit demonstrates that the credit market was also bifurcated between official and unofficial sectors. This indicates further that credit supplies were highly sought-after within the context of a cash-strapped agricultural society in the late-Ottoman Balkans and perhaps even harbored some value-producing potential in special circumstances. Nevertheless, this is an aspect of the regional credit market that deserves further attention beyond the scope of this chapter.

Some scholars of global value chains have focused on the distribution of value along supply chains and the financial viability of trade. This approach frames value chains as structural-functional systems, rather than as social and historical phenomena as such. Within supply chains, value can be captured by credit mechanisms which, historically speaking, allowed well-positioned commercial agents to diversify beyond the exploitation of labor or ownership of physical property. Although most Ottoman merchants in the late nineteenth century remained invested in ownership or control over physical spaces, such as fields and factories, and the relevant labor supply therein, the creation of debt dependency in certain commercial relations and the securing of political privileges also allowed elite

merchants with diverse financial portfolios to maximize their profitability. This ran parallel to a process wherein debt obligations also brought peasants into contractual debt relations with their urban creditors, many of whom were the same individuals as those who captured the market share of urban and rural entrepreneurs. Credit mechanisms such as the Ottoman *poliçe* (Italian: *polizza*; Arabic: *bulsa*; Gr. *συναλλαγματική*) and the *bono*, not to mention the entire *pey* system for advance purchasing were central to this process. Whether or not these mechanisms created value in any real sense, they certainly allowed for value to be fictionally transferred from countryside agriculture to the commercial and financial sector of the urban centers in Kavala and, more importantly, Salonica.

Tobacco merchants operating in Ottoman and Austro-Hungarian domains throughout the late nineteenth century relied on diverse commercial networks, political privileges, and control of specific resources to remain profitable within this industry. Their leverage of financial networks, credit mechanisms, and legal institutions to shore up their economic strength, in particular, remains relatively underexplored. To respond to this lacuna within the financial and commercial history of the eastern Mediterranean, I have proposed here that value-chain analysis be applied to trans-regional credit markets by using the tobacco industry of the southern Balkans as a framing mechanism. To do so requires some theorization of credit itself as a mechanism for altering social relations, as suggested by Costas Lapavistas. Within the context of the 1880s and 1890s, however, access to European credit markets also relied on the accumulation of capital over prior decades and, as a result, did not always overlap with the commodity chain itself. Put slightly differently, the broader networks

of the tobacco tycoons in Macedonia and Thrace were built alongside other developing industries, such as bricks and ceramics, extensive regional mining, investments in the expanding railway system, and bread-and beer-making.

This is yet another aspect of this history which deserves separate analysis. Nevertheless, as this chapter demonstrates, the legal and financial networks which facilitated the domination of credit markets by institutional lenders in the late nineteenth century also allowed elite merchants to seize value within the tobacco trade throughout the last quarter of the nineteenth century. As numerous instances of social unrest from early twentieth-century Macedonia and Thrace demonstrate, debt dependency in the countryside – thanks to decades of profiteering by merchants and commercial firms – had become a major source of tension. This also became an impetus for policy debates in the Second Constitutional Era and in the post-Ottoman period, which revolved around the extent to which support for the industry would trail behind global enterprises or would be exclusively state-led in Turkey and in Greece.⁶⁴

64. *Drama Tütüncü Kongresi Mukarreratı; Kavala tütün kongresi.*

From National Chain(s) to Global Networks: Competition and Adaptation in the Greek Cigarette Industry (1950-1980)

Nikos Alexis

During the first decades after World War II, the Greek cigarette industry underwent a deep process of transformation. The industry had previously produced cigarettes made of Oriental-type Greek tobacco for the domestic market. From the 1960s onward, the firms making up the sector started to gradually diversify their production. After experimenting with various features of cigarettes that had become popular in other countries, they began to produce American-type blended cigarettes for the Greek market. During the following decade, i.e., the 1970s, the major

companies started to cooperate officially with American firms through licensing agreements, and by participating in their expanding international networks.

In this article, I examine how the Greek cigarette industry, initially structured as a value chain organized within the confines of the national economy, became interconnected with the emerging Global Production Networks that came to characterize the international tobacco industry. I claim that the limits of the internal market and the competition of the big Greek companies in a restrained environment were crucial factors that motivated, or at least accelerated, this transition. Therefore, rather than being imposed by external pressures only, the transition also reflected the intentional choices of the Greek cigarette manufacturers. They made such decisions in response to issues that arose domestically and to improve their ability to capture value by forming new fields of consumption.

My study draws from the literature on Global Production Networks.¹ Core concepts of this theoretical and methodological approach, such as *strategic partnership*, *cou-*

1. Neil M. Coe and Henri Wai-Chung Yeung, *Global Production Networks: Theorizing Economic Development in an Interconnected World*, (Oxford: Oxford University Press, 2015); Neil M. Coe and Henri Wai-Chung Yeung, "Global Production Networks: Mapping Recent Conceptual Developments," *Journal of Economic Geography* 19, no. 4 (2019): 775-801; Martin Hess and Neil M. Coe, "Making Connections: Global Production Networks, Standards and Embeddedness in the Mobile-Telecommunications Industry," *Environment and Planning A: Economy and Space* 38, no. 7 (July, 2006): 1205-1227. Competitive Advantage theory also informs this study: Michael Porter, *Competitive Advantage: Creating and Sustaining Superior Performance*, (New York: The Free Press, 1985); Michael Porter, "The Value Chain and Competitive Advantage," *Understanding Business: Processes*, ed. David Barnes (London and New York: Routledge, 2001), 50-66; Prescott Ensign, "Value Chain Analysis and Competitive Advantage," *Journal of General Management* 27, no. 1 (September, 2001): 18-42.

pling, decoupling, value capturing, and embeddedness, are particularly useful for analyzing the processes that resulted in the connection of Greek cigarette firms with multinational enterprises in the cigarette sector. Yet, I use the GPN theory from a historical perspective. Taking full advantage of the possibilities that this approach allows for requires conceptual flexibility, given the limitations of a theoretical model mainly implemented to describe ongoing 21st-century processes. My starting point is the assumption that adequate answers to questions concerning the initial emergence, and organization, of Global Production Networks presuppose such a historical perspective.² By focusing on the period when the systematic formation of structures like the GPN started, this article contributes to the answering of such questions. The cigarette industry in particular, which is the focus of this chapter, constitutes an understudied topic in the existing GPN literature.³ What makes it important is the fact that the internationalization of this sector coincides with the period when Global Production Networks started to gain prominence in the world economy.

As the globalization of American cigarette enterprises intensified from the 1960s onward, dilemmas emerged around the ideal way for them to expand. Licensing agreements were one of the alternatives available, besides purchasing stock in, or completely taking over, other firms. As

2. According to Coe and Yeung, GPN theory has to address such questions. Coe and Yeung, *Global Production Networks: Theorizing*, 201.

3. To my knowledge, an article by Nicole D. Breazeale is the only widely available study of the American cigarette industry including a GPN perspective: "The impact of Pressure Groups on Inter-Firm Competition in the Cigarette-Manufacturing Sector: A Global Value Chain Approach," *Competition and Change* 20, no. 4 (2016): 275-292.

I show in this article, licensing agreements were sometimes the tip of the iceberg, covering more profound strategic interconnections between firms. The role of such contracts in forming specific GPNs is another topic for further discussion that this chapter highlights.

The chapter is divided into three parts. The first describes the national chain of the postwar Greek cigarette industry. This chain was the outcome of previous historical processes, during which actors such as the state, small and big companies, the industry's workers, and tobacco cultivators, interacted. Despite the readjustments that the chain underwent during the early postwar era, some of its characteristics, such as the use of Greek Oriental tobacco, its orientation toward the domestic market, and its relatively simple systems of production and distribution, remained essentially unchanged. This whole complex ran against its limits when the price of raw materials rapidly increased, and firms responded by seeking new paths to maintain, and even improve, their value-capturing capabilities.

The second section of the chapter describes the transformation that the Greek cigarette industry underwent during the period from 1955 to 1970 by presenting three episodes of innovation: a) the introduction of filter cigarettes; b) the launch of king-size cigarettes; and c) the experimentation of Greek cigarette firms with the production of American-style blended cigarettes for the domestic market. I claim that the adoption of various international trends was intentional during a period when Greek cigarette manufacturers were seeking to improve their position within the domestic market.

I dedicate the third part of this chapter to investigating the coupling between Greek cigarette firms and multinational enterprises. The aspirations that drove this process,

the dilemmas that emerged around the most suitable form of interconnection, and the more profound levels of partnership that accompanied the licensing agreements are analyzed here. I also investigate, albeit partially, the long-term impact of those coupling processes, as well as their different outcomes, for Greek cigarette firms.

The study is based on a variety of primary and secondary sources. I extract important information from the journal *Kapniki Epitheorisis* (Tobacco Review), as well as newspapers *Oikonomikos Tachydromos*, *To Vima*, and *Eleutheria*. The papers of Nikolaos Makarezos, Minister of Coordination during the Colonels' regime (1967-1974) provided data regarding the issues around the tobacco varieties destined for domestic consumption (hereinafter "esoterika varieties"), and the policies of the dictatorship more generally. I have reconstructed the interaction between Greek and international cigarette manufacturers based on documentation kept at the digital archive, *Truth Tobacco Industry Documents*. The archival collections of the American cigarette enterprises that are accessible there contain correspondence between Greek and American firms, as well as reports by American companies about the Greek market. Lastly, I used the digital library of ELSTAT (Greek Statistical Authority) to collect additional data.

THE POSTWAR GREEK CIGARETTE INDUSTRY

For most of the 20th century, Greek cigarette manufacturers produced cigarettes for the domestic market. This was not a Greek peculiarity, as cigarette manufacturing was organized as a domestically oriented sector in a variety of countries worldwide. In many of them, such as France,

Bulgaria or Turkey, cigarette manufacturing and tobacco cultivation were organized as state monopolies. Although establishing a state monopoly in tobacco was also repeatedly discussed in Greece, the firms of the sector remained mainly under private control.⁴ The trend towards the concentration of the industry accelerated in the interwar era, to peak in the aftermath of World War II.⁵ During the period under examination, three large companies, Papastratos, Keranis, and Karelia, shared the vast majority of the market. Another big company was Matsaggos, which closed in the 1970s after a prolonged crisis.⁶ Among the smaller firms, only Georgiades and Konstantinou held a significant market share for short periods.

In Greece, as well as in other countries of the Eastern Mediterranean, like Bulgaria and Turkey, a distinctive group of tobacco varieties was grown, known as Oriental or Turkish. Their cultivation flourished during the first half of the 20th century, and until the 1950s they were considered of exceptionally high value in international markets. They were used in several countries for the production of purely Oriental cigarettes, and were mixed with flue- and fire-cured tobacco for the production of American blended cigarettes.⁷ Greek firms produced particular kinds of

4. There were some exceptions to this general rule, since the government intervened to prevent the bankruptcy of Matsaggos and other smaller firms.

5. T. Labrianiadis, *Industrial Locations in Capitalist Societies: The Tobacco Industry in Greece 1880-1980* (PhD Diss, London School of Economics and Political Sciences, 1982), especially sections 3.4 and 5.4.

6. Thanasis Betas (Θανάσης Μπέτας), “Καπνοβιομηχανία Ματσάγος εν Βόλω, 1918-1972: Εργασία και επιβίωση στο Βόλο” (PhD Diss, University of Thessaly, 2015).

7. Juan Carmona-Zabala, “German economic power in Southeastern Europe: The case of Reemtsma and the Greek tobacco merchants (1923-1939),” *Business History* 64, no. 3 (2022): 539.

oriental cigarettes by using varieties of oriental tobacco from Greece's central and southern districts, which were consumed only domestically. They added only a low percentage of high-quality oriental tobacco from Macedonia and Thrace, which was largely exported, to improve flavor and aroma. They did so mainly for their most expensive cigarette brands.

While the value chain of tobacco in this period was generally uncomplicated,⁸ in the particular case of Oriental tobacco it was even simpler. Some processes essential for other varieties, such as topping and nicotine reduction, were not required.⁹ In Greece, the groups of actors participating in the chain were relatively few. Cigarette firms directly purchased the tobacco from the individual farmers or their cooperatives and distributed their final products through their agents to retailers, without intermediaries, avoiding unnecessary transaction costs.¹⁰ The domestic economy absorbed about 90% of the industry's gross added value, since cigarette paper and packing material constituted the only significant inputs from abroad.

The tobacco sector also had a unique role in the finances of the Greek state. In the early 1960s, cigarette taxes accounted for about 14% of the total tax revenues of the state.¹¹ The government was omnipresent in the sector's af-

8. Breazeale, "The impact": 279.

9. Vasilis K. Thasitis (Βασίλης Κ. Θασίτης), *Η ελληνική βιομηχανία σιγαρέττων* (Athens: Εκδόσεις Καπνικής Επιθεωρήσεως, 1962), 23. According to Vasilis Thasitis, some other unnecessary processes for the oriental tobacco were the lessening of bitterness, the artificial improvement of taste, and fire-curing.

10. Thasitis, 15, 23, 80.

11. Eleutherios Skandalis (Ελευθέριος Σκανδάλης), "Ανάγκη ριζικών αλλαγών δια να ανθέξη η καπνοβιομηχανία: θα είναι σκληρός ο

fairs. It regulated, sometimes directly and others indirectly, the price of cigarettes and the profit margins of manufacturers and retailers. Even the classes of cigarettes, their size and the quantity of tobacco that they contained were defined by the state. In such a framework, firms had only marginal opportunities to improve their value-capturing via price competition.¹² Reductions in the cost of raw materials and cuts in the general production costs constituted the only alternative path for improving their added value and profit. Yet, a value chain analysis of the sector indicates that cigarette firms could achieve only insignificant gains by cutting those costs.

Greek cigarette manufacturers could not exert pressure on the suppliers of cigarette paper, as it was imported from abroad.¹³ The type of packaging needed to preserve the particularly fragile oriental cigarettes also made costs on this front difficult to reduce.¹⁴ Advertising was another area where cutting costs was no easy task, as it was central to increasing per capita consumption and promoting new products. Setting aside the question of its actual effectiveness, advertising was one of the few available instruments to redistribute market shares. Last, labor costs constituted about 16% of the gross added value in the early 1960s and

ανταγωνισμός των ξένων επιχειρήσεων,” *Οικονομικός Ταχυδρόμος*, 14 September 1961, 712 (30).

12. The Greek state imposed a ceiling on the price of every class of cigarettes. As the prices tended to equalize with the top, the increase in companies' profit was based only on reducing the cost of raw materials and improving productivity. In contrast, in the United States, as Nicole Breazeale suggests, cigarette firms preferred to transmit the additional charges in the final price of the products until the 1970s. Breazeale, “The impact”: 280.

13. Thasitis, *Η ελληνική βιομηχανία σιγαρέτων*, 77.

14. Skandalis, “Ανάγκη,” 712 (30).

decreased to 11% until the end of the decade. This reduction became possible through personnel cuts that made up for salary increases. From about 7,000 workers in 1960, cigarette manufacturing came to employ less than 5,000 in 1970.¹⁵ The increased expenses in infrastructure and machinery during the 1960s counterbalanced, at least partially, those savings.

Tobacco was not only the most pricey material, covering about 40% of the industry's total expenses in the early 1960s.¹⁶ The firms of the sector had also to work with various formal and informal restrictions on leaf supply. Some of those constraints were the result of a Greek peculiarity: the informal administrative distinction between export-oriented and domestically consumed (*esoterika*) tobacco. Although the law did not establish this division clearly, various legislative provisions accepted it implicitly or explicitly; for example, when limiting Greek manufacturers' purchases of export-oriented tobacco varieties. In addition, cigarette firms had to comply with the terms that accompanied the interest-bearing credit that they received with governmental approval to finance their tobacco purchases. Among other conditions, those terms precisely specified the period for buying tobacco, as well as quotas regarding the amount of leaf that would be sourced from specific regions.¹⁷

15. Greek Statistical Authority (Ελληνική Στατιστική Αρχή), “*Ετήσια Βιομηχανική Έρρευνα*,” Digital Library (ELSTAT), accessed October 21, 2022, http://dlib.statistics.gr/portal/page/portal/ESYE/category-years?p_cat=10007989&p_topic=10007989.

16. Thasitis, *Η ελληνική βιομηχανία σιγαρέτων*, 77.

17. Since the legal framework was constantly changing, here I only mention some basic rules. For additional information on the issue of tobacco and credit, see Nikos Leonidakis (Νίκος Λεωνιδάκης), “Η χρηματοδότηση της

During the early postwar period, the industry's complaints about the price of the esoterika varieties were sparse, and mainly aimed at pressuring the government into allowing higher cigarette prices. As esoterika prices, however, started to increase in the early 1960s,¹⁸ this upward trend exacerbated overproduction on the countryside, as farmers resorted to various questionable methods to maximize their yields and income. High-quality Oriental tobacco, unlike the American varieties of the commodity, required only limited irrigation and grew in mountainous areas. By using more water and fertilizers, or expanding the cultivation to more lowland areas, some farmers downgraded the quality of their product.¹⁹ Under such circumstances, cigarette companies not only had to pay more for the tobacco, but were also pressured by the government to absorb larger quantities and pile up stocks in their warehouses. As a result, the issue of esoterika varieties became prominent for the sector's sustainability.

The increase in domestic tobacco prices was a multivariate phenomenon. A plant disease known as *peronospora* infected the Oriental tobacco of neighboring countries, which resulted in a favorable conjuncture for the price of

εμπορίας και επεξεργασίας του καπνού κατά τη μεταπολεμική περίοδο” in *Πρακτικά 1^{ου} Επιστημονικού Συνεδρίου, Ο καπνός στην ιστορία: οικονομικές, κοινωνικές και πολιτισμικές προσεγγίσεις*, ed. Angelos Pali-kidis (Άγγελος Παληκίδης) (Kavala: Ινστιτούτο Κοινωνικών Κινήματων και Ιστορίας Καπνού, 2020), 105-120.

18. Unknown, “Υπάρχει πρόβλημα καπνών εσωτερικού,” *Οικονομικός Ταχυδρόμος*, 20 September 1962, 637 (1) and 648 (12). To examine the issue of esoterika varieties, I used the homonymous dossier kept at the Nikolaos Makarezos archival collection. Collection N.E. Makarezos, A278, Institute for Mediterranean Studies, Rethymnon.

19. Unknown, “Λόγω της υπερπαραγωγής και των τιμών: δυσχερέστατη η απορρόφηση των καπνών εσωτερικής καταναλώσεως,” *Καπνική Επιθεώρησης* 18, no. 208 (March, 1964): 4415.

export-oriented Greek tobacco. This upward trend also affected *esoterika* varieties. Losses in terms of production volume were quite limited, while production costs increased because of the need to prevent the spread of the disease. In this context, the meager increase in the price of *esoterika* varieties compared to that of the export-oriented tobacco was one of the farmers' reasons to protest. The most dramatic events occurred in Aetolia-Acarnania, where the police shot and killed a farmer in September 1962.²⁰ Collective action and mobilization reinforced the bargaining power of farmers for the upcoming period. They insistently demanded higher prices from the industry and the state, whose policies were decisive in setting the price of tobacco.²¹

The most systematic effort in settling the *esoterika* question was that undertaken by the centrist Enosis Kentrou government in 1964. Minister of Finance, Konstantinos Mitsotakis presented a new regulatory framework, and described it in his parliamentary speech as the imposition of a state monopoly on *esoterika* varieties. Under the new law, the state would be responsible for the classification of tobacco into different quality grades, and for price setting.²² While the new framework allowed the cigarette industry to set cigarette prices freely, it provided that every increase in the price of the final product had to be accompanied by an analogous rise in

20. Unknown, "Υπάρχει πρόβλημα καπνών εσωτερικού," *Οικονομικός Ταχυδρόμος*, 20 September 1962, 637 (1) and 648 (12). Unknown, "1 νεκρός και 30 τραυματίαι κατά τας χθεσινάς συγκρούσεις καπνοπαραγωγών και χωροφυλακής. Οι διαδηλώται διαλύθησαν ησυχώς το εσπέρας," *Το Βήμα*, 9 September 1962, 12.

21. For additional information on the epidemic's impact on Greek tobacco policy, see the chapter by Stergiopoulos in this volume.

22. Konstantinos Mitsotakis (Κωνσταντίνος Μητσοτάκης), "Τα καπνά εσωτερικής καταναλώσεως," *Καπνική Επιθεώρησης* 19, no. 220 (March, 1965): 4710.

the cost of the tobacco that firms used for its production. An additional measure, which would prove favorable for the sales of cigarettes of superior quality, was the reform of the system for calculating the taxation of cigarettes.²³

While the new measures were sufficient to guarantee the sustainability of the sector at least temporarily, they could not meet the expectations for its upgrading and expansion during an era when the broader Greek economy was flourishing.²⁴ The steady growth of consumption in a limited national market, combined with the inability to compete on the basis of cost reduction or pricing, provided additional incentives for Greek cigarette manufacturers to seek new ways of capturing value. As a result, a period of intense competition commenced on the basis of product differentiation, during which the individual firms tried to improve their position in the domestic market. Their seeking for competitive advantage created a spiral of innovation, which accelerated the transformation of the sector as a whole.

THE PERIOD OF INTENTIONAL TRANSFORMATION

During the early postwar period, Greek cigarette firms would collectively bargain with farmers and the state, as

23. Unknown, “Το νέον καπνοβιομηχανικόν καθεστώς,” *Καπνική Επιθεώρησης* 18, no. 215 (October 1964): 4567-4569.

24. The Greek economy developed rapidly during the 1950-1973 period. See, indicatively, Chrysafis Iordanoglou (Χρυσάφης Ιορδάνογλου), *Η ελληνική οικονομία μετά το 1950*, vol. 1 (Athens: Μορφωτικό Ίδρυμα Εθνικής Τραπέζης, 2020); George Pagoulatos, *Greece's New Political Economy: State, Finance and Growth from Postwar to EMU* (New York: Palgrave Macmillan, 2003); Panos Kazakos (Πάνος Καζάκος), *Ανάμεσα σε κράτος και αγορά: Οικονομία και οικονομική πολιτική στη μεταπολεμική Ελλάδα 1944-2000* (Athens: Πατάκη, 2001).

evinced, for example, by their joint announcements in the press. The dire circumstances of the postwar reconstruction and the shared goal of securing a favorable postwar environment for the whole industry go a long way in explaining this unified stance. This attitude was not, after all, a Greek peculiarity in the postwar world. While, in Greece, such an alliance was probably informal, in Germany cigarette manufacturers formed an official coalition to negotiate tax-related matters with the government more effectively.²⁵

In Greece, even an informal unification in the sector was probably absent twenty years later; a reference to the lack of unity appears in internal Philip Morris correspondence from 1978. The source not only emphasizes the absence of a Cigarette Manufacturer's Association in the country, but also the intense competition among the five leading cigarette manufacturers, as well as the virtual non-existence of systematic cooperation for the resolution of common issues.²⁶ I examine the relations between Greek cigarette firms and international enterprises in the next section. For now, suffice it to say that this climate of intensifying competition was an important structural factor. I claim that it was closely related to the firms' systematic search for competitive advantage from the mid-1950s onward.

The year 1954 saw the implementation of a voluntary closure scheme targeting many small and medium-sized

25. Tino Jacobs, *Rauch und Macht: Das Unternehmen Reemtsma 1920 bis 1961* (Göttingen: Wallstein, 2008), 170.

26. Smoking and health visit of G. Segre and PI to Athens on 780322, 28 March 1978, Philip Morris Records; Master Settlement Agreement/1363/2024949722/2024949809/Greece, University of California San Francisco Library, <https://www.industrydocuments.ucsf.edu/docs/slxw0117>.

cigarette manufacturers, which were compensated by the state and the larger firms, who purchased their machinery.²⁷ From then on, it was clear that a small number of companies would compete to dominate the domestic market. The antagonism of those firms is crystallized in specific episodes of innovation that were crucial for the transformation of the sector. One characteristic of those episodes is that all the big companies would swiftly emulate any first moves that one of them might make, making it impossible for any competitor to maintain any consistent supremacy. As a result, the big firms were constantly pressured to introduce additional innovations that would give them an edge, even if it was only for a short period of time.

The production of filter-cigarettes for the Greek market constitutes the first episode in this self-reinforcing wave of innovation.²⁸ It took place at the time that Keranis slightly surpassed Papastratos in sales volume, taking the first place among Greek cigarette manufacturers. As a result of this pressure, the production of filter cigarettes became essential for Papastratos, with the company ordering the necessary equipment even before the government's official permission for their manufacture.²⁹ The new product was brought to market during the summer of 1957, but the ex-

27. Betas, "Καπνοβιομηχανία," 127.

28. For the technological transformation of the Greek cigarette industry after the Second World War, see the results of a recent research project carried out by Betas. Thanasis Betas, "Filter-cigarettes... Business strategies, technological changes and organizational innovations in the Greek cigarette industry between 1945-1973," Research Centre for the Humanities, accessed October 21, 2022, <https://www.rhumanities.gr/en/filter-cigarettes-business-strategies-technological-changes-and-organizational-innovations-in-the-greek-cigarette-industry-between-1945-1973>.

29. Unknown, "Το σιγαρέττον με επιστόμιον φίλτρου εις την διάθεσιν του ελληνικού κοινού," *Καπνική Επιθεώρησις* 11, no. 127 (May 1957): 2565.

clusivity of Papastratos only lasted for about two months. By the end of the year, five of the six prominent companies were producing filter cigarettes. Yet Papastratos' first move gave it a slight advantage in the short run. It remained a step ahead when it diversified its filter cigarette production before its competitors, by providing a cheaper version in the autumn of 1957. At least until the end of the year, Papastratos was able to retain its leading position in filter cigarette sales.³⁰

The dissemination of filter cigarettes in Greece was not a smooth and linear process. A downward trend followed their initial success in the market, as smokers became suspicious about the quality of tobacco that they contained. There were rumors, sometimes spread by the press, that filters gave manufacturers an opportunity to fill their products with cheaper raw material. Additionally, in Greece, as well as in neighboring Bulgaria, Oriental cigarettes were socially perceived as less harmful than the American-style blended.³¹ Despite these negative predispositions in some sectors of the public, sales rose again in 1963. By the end of the decade, the new cigarettes represented more than half of total cigarette demand in the country.³²

These developments were taking place at a time when anxiety around the effects of smoking on health were be-

30. Unknown, "Η ελληνική βιομηχανία σιγαρέττων το 1957," *Καπνική Επιθεώρησης* 11, no. 134 (December, 1957): 2722.

31. Mary C. Neuburger, *Balkan Smoke: Tobacco and the Making of Modern Bulgaria* (Ithaca and London: Cornell University Press, 2013), 186; Thasitis, *Η ελληνική*, 47.

32. Unknown, "Η δραστηριότητα της ελληνικής καπνοβιομηχανίας: σημαντικές ανακατατάξεις κατά το 1962," *Καπνική Επιθεώρησης* 17, no. 195 (February 1963): 4107; Unknown, "Η ελληνική σιγαρεττοβιομηχανία," *Καπνική Επιθεώρησης* 25, no. 290 (January 1971) :15.

coming more intense worldwide.³³ Therefore, it would be reasonable to think of the introduction of filter cigarettes in Greece as inevitable, as a matter of time. Yet the manufacturing of king-size cigarettes for the Greek market some years later could be perceived as a more intentional decision. This second episode of innovation began when Keranis launched four new cigarette brands in the summer of 1963. All of them were longer than the ordinary Greek cigarettes. *Dilos* and *Delfoi* had a length of 75mm, while *Keranis* and *Pallas* were 85mm, effectively becoming the first king-size cigarettes produced in Greece.

In the case of long cigarettes, smokers' acceptance of the new product was smoother, with the four new brands covering more than 10% of the total cigarette sales in the country two months after their initial launch. Immediately, Papastratos responded to Keranis' move by launching two king-size brands by the end of the year.³⁴ The introduction of longer cigarettes inaugurated a new direction in the diversification of the Greek cigarette industry's production, followed by the extensive use of American-style boxes for packing its products.

Until the early 1960s, the various Greek cigarettes had been traditionally distinguished by their blend, rather than by features like their size or appearance. Their partial uniformity pushed companies to seek alternative ways of promotion and advertising, such as packaging decoration.³⁵

33. Sarah Milov, *The Cigarette: A Political History* (Cambridge and London: Harvard University Press, 2019), 109, 118.

34. Unknown, "New cigarette brands in the Greek market," *Καπνική Επιθεώρησης* 17, no. 202 (September 1963): 4282.

35. The book, *A history of the Greek cigarette*, contains many images of cigarette boxes: Manos Haritatos and Penelope Giakoumaki, *A History*

However, what attached smokers to certain types of cigarettes was mainly their flavor and aroma, with branding having a specific role.³⁶ The traditional Greek cigarette contained Greek Oriental tobacco, had a “flattened” shape (i.e., not perfectly cylindrical), was shorter in length than most cigarettes known today, and contained more tobacco than the emerging international brands. It was mainly packed in square boxes containing twenty, sometimes ten cigarettes. Even if some of those features did not constitute a Greek singularity, their combination resulted in the formation of a distinctive national type of cigarette.

The extensive adoption of international patterns resulted in the differentiation of production in the form of new hybrid cigarettes. These new products were still filled with Greek Oriental tobacco but were distinguishable from the traditional cigarette by their “international” external features. Their launching indicates a more profound change of direction, rather than a continuum with the preexisting varieties of the product. This shift becomes even more evident when we take into consideration the gradual readjustment of the regulatory framework that was required before it could take place. In general, hybrid cigarettes proposed new, less inelastic patterns of consumer behavior, or at least were intended to do so. Additionally, they embodied the industry’s effort to strike a balance between national specificity and international trends, as exemplified by an advertisement of Keranis’ king-size brand *Pal-*

of the Greek cigarette, (Athens: The Hellenic Literary and Historical Archive, 1998).

36. Breazeale also highlights the significant role of branding in the effort of American cigarette firms to grow their market share in the United States during the period between 1960 and 1980. Breazeale, “*The impact*”: 280.

las. It described *Pallas* as “lightly aromatic according to American patterns but adapted to Greek tobaccos and the desires of the Greek smokers”.³⁷ The production of hybrid cigarettes constituted an intermediate step before the later experimentation of Greek companies with the production of American blended cigarettes for the domestic market.

The manufacturing of blended cigarettes started just a few years later, with changes in the international environment having a significant impact on the process that led to this innovation. In the aftermath of World War II, American tobacco penetrated the European markets, using the Marshall plan as a Trojan horse. The most prominent example of rapid alteration in smoking habits was that of Germany, where American blended cigarettes soon displaced the oriental.³⁸ Such changes in consumer habits created a favorable environment for the expansion of American enterprises worldwide. The ongoing homogenization of smoking habits abroad also caused a climate of concern in Greece. Angst further escalated due to the Association Agreement with the European Economic Community, signed in 1961. According to this arrangement, Greece

37. Unknown, “Τα σιγαρέττα μας στην ελληνική αγορά – Ανακοίνωση,” *Ελευθερία*, 23 June 1963, 3.

38. Sarah Milov, “Smoking as Statecraft: Promoting American Tobacco Production and Global Cigarette Consumption, 1947 – 1970,” *The journal of policy history* 28, no. 4 (2016): 717. Germany was one of the countries that traditionally produced cigarettes filled with oriental tobacco. See also: Mogens Pelt, *Tying Greece to the West: US-West German-Greek Relations 1949-1974* (Copenhagen: Museum Tusulanum Press, 2006), 95. On the Marshall plan in Greece, see Christos Chatziiosif (Χρήστος Χατζιωσήφ), “Η πολιτική οικονομία της ανασυγκρότησης και του εμφύλιου” in *Ιστορία της Ελλάδας του 20^{ου} αιώνα: Ανασυγκρότηση – Εμφύλιος – Παλινόρθωση 1945 – 1952*, ed. Christos Chatziiosif, vol. 4(1) (Athens: Βιβλιόραμα, 2009), 9-61.

was required to gradually decrease, and eventually abolish, duty taxes for various products imported from Common Market countries.³⁹ Therefore, international cigarette firms would become able to use European subsidiaries to sell their cigarettes in Greece without restrictions.

Some articles in the tobacco industry journal *Kapniki Epitheorisis* (Tobacco Review) proposed a compromise between local and international standards as an ideal solution. More concretely, they made the case for the production of an American-style cigarette with a higher content of oriental tobacco than was usual in the existing international brands. The adherents of this idea raised a defensive argument, as well as an offensive one. First, they highlighted the illegal introduction of American cigarettes in the country and predicted that such novelties would easily influence Greek smokers. Second, they claimed that the Greek blend cigarette could penetrate international markets and fulfill the hopes for a flourishing, export-oriented Greek cigarette industry.⁴⁰ Discussion about such promising prospects was hardly new, although the arguments put forward were. In previous decades, hopes for the growth of Greek cigarette exports had revolved around the high quality of the Greek cigarette. In this period, the idea gained traction that the Greek cigarette industry could not persuade foreign smokers

39. Christos Tsakas (Χρήστος Τσάκας), “Οι Έλληνες βιομήχανοι μπροστά στην ευρωπαϊκή πρόκληση: Κρατική στρατηγική και ιδιωτικά συμφέροντα από τη σύνδεση με την ΕΟΚ στην αποκατάσταση της Δημοκρατίας” (PhD Diss, University of Crete, 2015), 43.

40. Vasilis Thasitis (Βασίλης Θασίτης), “Το πρόβλημα της εξαγωγής των σιγαρέττων,” *Καπνική Επιθεώρησης* 18, no. 217 (December 1964): 4605; Georgios Labrou (Γεώργιος Λάμπρου), “Η εξαγωγή των ελληνικών σιγαρέττων,” *Καπνική Επιθεώρησης* 19, no. 220 (March 1965): 4698; Unknown, “Η προώθηση της εξαγωγής σιγαρέττων,” *Καπνική Επιθεώρησης* 19, no. 225 (August, 1965): 4804. Skandalis, “Ανάγκη,” 712.

to “hellenize” their tastes, and should instead make products closer to those that they already were acquainted with.

In 1965, Papastratos launched *Old Navy*, the first American blended cigarette manufactured in Greece. Its production was a contentious issue for Minister of Finance, Konstantinos Mitsotakis, who demanded its postponement until a solution was found to the problems affecting the esoterika varieties, to which I referred in the previous section. While, in the case of filter cigarettes, Papastratos had ordered the necessary machinery before securing governmental approval for the production of the new cigarette, this time the company appealed to the Council of the State and was vindicated.⁴¹ According to Papastratos, *Old Navy* had the advantage of containing more Greek tobacco than the usual blended cigarette. The company publicly expressed its optimism about the product’s future expansion into international markets.⁴²

In the case of blended cigarettes, the pattern of self-reinforcing innovation appears again, albeit it developed more slowly than in the case of filter and king-size cigarettes. Keranis soon acquired the necessary equipment for producing cigarettes with the aroma of Virginia tobacco,⁴³ but other companies like Karelia or Matsaggos did not initially imitate the two first movers. With regard to the actual trajectories of those new products during their first years, I should point out that the hopes for a successful export trade in cigarettes remained unfulfilled for a long time. Papastratos’ *Old Navy*

41. Unknown, “‘Εκστρατεία λάσπης’ κατά της κυβερνήσεως – Σιγαρέττα και Σφακτηρία,” *Ελευθερία*, 21 October, 1965, 7.

42. Unknown, “Για ένα τσιγάρο,” *Το Βήμα*, 22 August 1965, 6.

43. Keranis advertised its acquired machinery for the production of blended cigarettes in *Οικονομικός Ταχυδρόμος*, 28 May 1970, 40.

and Karelia's *Oscar* were oriented towards domestic consumption, and competed with Oriental cigarettes. Their sales remained low for many years. The process of consumers shifting towards American blended cigarettes was a long one, despite intense promotion and advertising. In the history of cigarettes, numerous similar examples indicate that the rebalancing of supply and demand is not automatic; a period of adjustment in smokers' habits is often necessary, during which advertisement plays a central role.⁴⁴

SYNERGY WITH GLOBAL PRODUCTION NETWORKS

Roughly coinciding with the launching of *Old Navy*, Papastratos began the production of yet another blended cigarette for the Greek market. The manufacturing of *Astrotor* developed in collaboration with Reemtsma, a prominent German cigarette firm.⁴⁵ Reemtsma's experience in

44. The examples from the Greek and international experience are many. As examples, I shall mention the vast expenditures made by Duke to promote its cigarettes in the USA or the coexistence of machine and hand-made cigarettes for the whole decade of the 1910s in Greece. Patrick G. Porter, "Advertising in the Early Cigarette Industry: W. Duke, Sons and Company of Durham," *The North Carolina Historical Review* 48, no. 1 (January 1971): 31-43; Christos Karabatsos and Nikolaos Alexis (Χρήστος Καραμπάτσος και Νικόλαος Αλέξης) "Οι απαρχές της εκμηχάνισης στην ελληνική σιγαροποιία: εργατικός έλεγχος, εργοδοτικές πρωτοβουλίες και κρατική παρέμβαση στους χώρους εργασίας κατά τις πρώτες δεκαετίες του 20^{ου} αιώνα" in *Πρακτικά 1ου Επιστημονικού Συνεδρίου*, ed. Palikidis, 271-286. Last, consider the decrease of per capita cigarette consumption in Egypt after the massive mechanization of the sector. Relli Shechter, *Smoking, Culture and Economy in the Middle East: The Egyptian Tobacco Market 1850-2000* (London and New York: I.B. Tauris and Co Ltd, 2006), 93.

45. Unknown, "Εσωτερικά καπνικά ειδήσεις – Η νέα καπνοβιομηχανία Βάλντορφ – Αστόρια," *Καπνική Επιθεώρησης* 20, no. 231 (February, 1966): 4953.

the production of blended cigarettes containing a higher percentage of Oriental tobacco than American brands was probably helpful for the production of *Old Navy*, too.⁴⁶ This cooperation was only an initial step for Papastratos, which also agreed with Philip Morris to distribute American cigarettes in the duty-free market of the Athens airport. While collaboration with Reemtsma ceased during the second half of the 1970s, in the case of Philip Morris the partnership would have a longer duration and a more strategic character.

The partnership of Papastratos and Philip Morris went through various stages until the complete acquisition of the Greek firm by the multinational enterprise in 2003. The next step after the agreement for distribution in the duty-free market was the negotiations for producing Philip Morris brands in Greece via licensing. Negotiations lasted for a long time, which is indicative of the two parties' persistence on the points of disagreement, and on the detailed features of the new product. Eventually, the manufacture of *Marlboro* started in 1975, but Karelia had already begun to produce an American brand in December of the previous year. This firm from the Peloponnese was now the second biggest player in the domestic market. It soon reached an agreement with R.J. Reynolds to produce *Winston*.⁴⁷

Papastratos and Karelia were not the only Greek manufacturers seeking partnerships with leading American

46. Licensing Opportunity- Greece, 03 August 1972, Lorillard Records; Master Settlement Agreement/1783/81602116/81602516/AGREEMENTS. University of California San Francisco Library, <https://www.industrydocuments.ucsf.edu/docs/#id=hqxh0070>.

47. Unknown, "Αμερικανικό σιγαρέττο στην Ελλάδα," *Καπνική Επιθεώρησης* 28, no. 336-337 (November – December 1974): 257.

firms. The digital archive, *Truth Tobacco Industry Documents*, contains numerous sources containing correspondence between Keranis (by then ranked third in Greece in terms of size) and American firm Lorillard regarding the licensing agreement for the production of *Kent* in Greece. Negotiations lasted for about three years, with both sides persistently trying to attain a win-win outcome. Other parameters had to be set aside for issues like the promotion of the product in the domestic market. One of these was the exact composition of the Greek *Kent's* blend, as Keranis demanded a higher content of Greek tobacco, not only Oriental but also domestic flue-cured Burley, which was by then extensively cultivated in Greece. In line with this demand, Keranis proposed changes in the flavor of the cigarette. Without these modifications, the Greek firm contended, the original *Kent* could not meet the needs and preferences of Greek smokers.⁴⁸

During the negotiations, Lorillard persistently tried to avoid the deviation of the Greek product from its international standards. Exactly on which point of the spectrum between the national and international options the two firms finally met is unknown to us, as the text of the licensing agreement, signed by the two parties on March 1975, does not describe in detail the composition of the Greek *Kent's* blend.⁴⁹ Moreover, during this period, the attempt

48. Kent Production – Greece: Visit to G. A. Keranis Piraeus – Greece 000603-000608, 21 June 1974, Lorillard Records: Master Settlement Agreement/1688/89206721/89206768/Greece 720000, University of California San Francisco Library, <https://www.industrydocuments.ucsf.edu/docs/khvg0063>.

49. [Licensing Agreement for the production of Kent in Greece], 06 March 1975. Lorillard Records; Master Settlement Agreement/1783/81602517/81602737, University of California San Francisco

to reconcile tradition and innovation by manufacturing hybrid products lost steam, and Greek companies mainly sought to deviate from international standards to reduce production costs. In 1980, during the negotiation of Keranis with its new senior partner, British American Tobacco, for the licensing of Virginia cigarette brands, the Greek firm proposed the replacement of strip and stem, i.e., the original B.A.T. blend, with tobacco “sheet,” a product that was subject to lower duties and did not require costly investment in equipment for its processing. The representative of the transnational enterprise informed Keranis that B.A.T. would probably be unwilling to accept such a deviation from the global standards of its brand, and that “in any event, the gradual move away from the traditional oriental products [related to the country’s entry in the EEC] would probably require them to use more stem (of their own) in the future”.⁵⁰ Even during this transition towards the era of flexible specialization, the role of standardization remained central to many large companies. Therefore, strategic partnership arrangements often involved compliance with the imperative of global product uniformity.

British American Tobacco was now the senior partner of Keranis, as it had acquired the overseas rights of Lorillard’s brands. The position of the family-owned Greek

Library, <https://www.industrydocuments.ucsf.edu/docs/qyxh0070>. According to the licensing agreement document, Lorillard’s approval was necessary for any deviation from the international standards of Kent’s production.

50. Visit to Keranis-Greece. 13 October 1980, British American Tobacco Records/us062/bao745, University of California San Francisco Library, <https://www.industrydocuments.ucsf.edu/docs/nnwp0196>. The transition to an era of flexible specialization in the Global Production is also referred to by Coe and Yeung, *Global Production Networks*, 3.

firm in the market deteriorated during the 1970s, and the gap separating it from larger competitors, Papastratos and Karelia, in total sales was constantly widening. On the other hand, Keranis still enjoyed a good brand name in the most expensive classes of cigarettes, where it was still second in sales. Although the family members refused to sell a quarter of their shares to Lorillard in 1976,⁵¹ three years later they approached B.A.T., willing to sell part of their share.⁵² Another round of negotiations ensued, with the Keranis side being reluctant to fulfill some expectations of the multinational enterprise. British American Tobacco pursued, among other goals, the purchase of the majority of the shares, or at least to become the largest shareholder, at a convenient cost.⁵³ Eventually, the negotiations

51. Keranis, Greece, 20 February 1979, British American Tobacco Records/us062/ba0745, University of California San Francisco Library, <https://www.industrydocuments.ucsf.edu/docs/lfwpo196>.

52. [Note for Tobacco Executive Committee regarding GA Keranis], 1979, British American Tobacco Records/BA0754, University of California San Francisco Library, <https://www.industrydocuments.ucsf.edu/docs/xrlkj0224>; GA Keranis AE: Parameters of Acquisition, 01 June 1979, British American Tobacco Records/us062/ba0745, University of California San Francisco Library, <https://www.industrydocuments.ucsf.edu/docs/zgwp0196>; [Note from JF Roberts, B & W IT to Phil Right, BAT London regarding Tobacco Companies], 25 January 1979, British American Tobacco Records/BA0754, University of California San Francisco Library, <https://www.industrydocuments.ucsf.edu/docs/mzhy0224>; Visit to GA Keranis, Athens on 15th May 1979, 16 May 1979, British American Tobacco Records/us062/ba0745, University of California San Francisco Library, <https://www.industrydocuments.ucsf.edu/docs/nhwp0196>.

53. GA Keranis AE: Parameters of Acquisition, 01 June 1979, British American Tobacco Records/us062/ba0745, University of California San Francisco Library, <https://www.industrydocuments.ucsf.edu/docs/zgwp0196>; Keranis Visit – 13th/11th December, 1979, 02 January 1980, British American Tobacco Records/us062/ba0745, University of California San Francisco Library, <https://www.industrydocuments.ucsf.edu/docs/rjwp0196>.

collapsed for various reasons. There were disagreements regarding the valuation of the Greek firm. Furthermore, at B.A.T. there were concerns regarding the future of the Greek cigarette market and the role of Keranis in it.⁵⁴ This outcome did not prevent the negotiations for the renewal of the existing licensing agreements, or for the production of other B.A.T. brands by the Greek company.⁵⁵

Despite the financial hardship that it experienced at times, Keranis remained an independent company until its closure in 2006. It was not the only Greek firm that faced the dilemma of “licensing or acquisition.” According to *Truth Tobacco Industry Documents*, Philip Morris tried repeatedly from 1968 onward to participate in the shareholding of Papastratos, but met rejection by the owners of the Greek company.⁵⁶ It eventually acquired the Greek firm in 2003, after three decades of partnership. In 1995, Karelia rejected the latest, although probably not the only effort of Reynolds to participate in its shareholding.⁵⁷

The durability of cooperation arrangements between Greek firms and foreign multinationals makes the con-

54. [Minutes of Tobacco Executive Committee meeting held on 24th June 1980], 24 June 1980, British American Tobacco Records/xma0276/fd0236, University of California San Francisco Library, <https://www.industrydocuments.ucsf.edu/docs/ltjh0196>.

55. [Greece], 01 October 1980, British American Tobacco Records/gu0249/fd0015, University of California San Francisco Library, <https://www.industrydocuments.ucsf.edu/tobacco/docs/#id=fkvy0198>.

56. [Note from JF Roberts, B & W IT to Phil Right, BAT London regarding Tobacco Companies], 25 January 1979, British American Tobacco Records/BA0754, University of California San Francisco Library, <https://www.industrydocuments.ucsf.edu/docs/mzhy0224>.

57. B. Κώτσης [B. Kotsis], “Ο εμφύλιος των Καρέλια,” *Το Βήμα*, 14 November 2008, <https://www.tovima.gr/2008/11/24/finance/o-emfylivos-twn-karelia> (accessed 19 December 2022).

cept of *strategic partnership*, common in the literature on Global Production Networks, useful for describing their relations. The intertwining between Papastratos and Philip Morris; between Keranis and British American Tobacco; and between Karelia and RJ Reynolds continued for at least two decades. It was through these partnerships that the Greek cigarette industry participated in the Global Production Networks that formed around the major companies of the sector globally. The exchange of information between partners, and the commitment to common goals indicate that licensing agreements were only the tip of the iceberg, one made up of more profound interconnections between partners.

Although the examination of those deeper interconnections goes far beyond the chronological framework and the aims of this article, some indications were evident already in the early 1980s. A short report by Keranis informing B.A.T., via its subsidiary firm, Brown and Williamson, of the intention of Papastratos to export *Marlboro* cigarettes to Iraq is a telling example.⁵⁸ First, because the transfer of such information to the international company exceeded the mutual obligations of the licensing agreement, indicating the development of a deeper interdependency among those firms. Second, the piece of information itself reveals a more profound interconnection between Papastratos and Phillip Morris than just an agreement involving the Greek market, as there was the prospect of the Greek company functioning as a base for doing business in a broader

58. Greek Marlboro Exported to Iraq, 15 February 1982, Brown and Williamson Records; Master Settlement Agreement/1752, University of California San Francisco Library, <https://www.industrydocuments.ucsf.edu/docs/mykn0144>.

area. Other documents indicate the collaboration between Papastratos and Philip Morris for the preparation of an interview with a Greek newspaper regarding the tobacco-and-health issue, which again reveals the multi-faceted character of the association.⁵⁹

The depth of the partnerships discussed here became evident once again when the American enterprises tried to influence government policies by using their partners as intermediaries. One of the issues that were discussed by the executives of Philip Morris in the inter-firm correspondence was the necessity of a better coordination of the Greek cigarette manufacturers and the wider “tobacco family”.⁶⁰ In addition to creating a counterweight to the anti-smoking governmental policies that were taking shape in Greece from the late 1970s, such cooperation could exert pressure toward the country’s alignment with the new international standards. Likewise, Philip Morris had pressed Papastratos some years before, in 1976, to join forces with the other domestic firms and lobby the government for a decrease in the tobacco content required per cigarette.⁶¹

59. Greece – Smoking and health, 21 April 1978, Philip Morris Records; Master Settlement Agreement/2492/2024949722/2024949809/GRECE, University of California San Francisco Library, <https://www.industrydocuments.ucsf.edu/tobacco/docs/#id=gsjxo111>.

60. Smoking and health visit of G. Segre and PI to Athens on 780322, 28 March 1978, Philip Morris Records; Master Settlement Agreement/1363/2024949722/2024949809/Greece University of California San Francisco Library, <https://www.industrydocuments.ucsf.edu/docs/slxw0117>.

61. Greece Tests No. 16 and 17, 5 November 1976, Philip Morris Records; Master Settlement Agreement/7146/2501265315/2501265325/No. RWM Greece 760000 - 770000, University of California San Francisco Library, <https://www.industrydocuments.ucsf.edu/docs/gtbjo115>. The Greek cigarettes contained more tobacco per piece than was customary in other countries, with this regulation not only increasing their production costs

The cases mentioned above indicate the strategic character of the partnership between Greek and international firms. In addition, they highlight how strong partners in the national markets can secure effective embeddedness for the broader networks in which they participate, and specifically for the lead firms of those networks. By incorporating strong national firms in their network, lead firms also enhance their bargaining power vis-a-vis national actors and institutions. They can deploy their national partners as mechanisms for exercising the network's power in a specific place and time.

On the other hand, the licensing agreement constitutes a form of loose connection. It offers fewer obligations, less risk to the lead firms, and more freedom to their partners. In the case of the Greek cigarette industry, this kind of association represented an opportunity to deploy various counterweights to the governance and the power that lead firms exerted over the networks built around them. By producing a variety of blend brands of their own, i.e., other brands besides the ones established by the licensing deals, Greek firms diminished their dependence on the lead firms, lessening the potential damage that *decoupling* might cause in the future.⁶²

While Papastratos was taken over by Philip Morris, Keranis and Karelia decoupled from their multinational partners. In the case of Keranis, decoupling from B.A.T. took place some years before the former's bankruptcy and

but also hindering the uniformity of the "made in Greece" international brands to those manufactured in other countries around the world.

62. After Greece's accession into the Common European Market, cigarette imports increased. Various foreign brands entered the country in addition to those domestically produced by virtue of licensing agreements.

definitive closure. The correlation between those two outcomes constitutes a topic for further investigation. On the other hand, the breakup of Karelia and Reynolds, which had sold its overseas operations to Japan Tobacco in 1999, constitutes an example of the junior strategic partner's ability to rebuild its network after decoupling.

CONCLUSIONS

The focus of Global Production Network theory on the *embeddedness* of networks in local/national settings makes it a useful tool for the analysis of the interdependency between national firms and multinational enterprises, at least during the early phase of the Global Production Networks emergence. The focus on the interactions of global actors with local, national, and regional ones grants GPN considerable analytical power when compared to similar theories. In the case of the linkages between Greek cigarette firms and the multinational enterprises, the broader conceptual toolkit of GPN is helpful for an analysis of dynamic processes. *Value capturing, coupling* and *decoupling*, and especially *strategic partnership* appear to be appropriate descriptive and methodological tools for the examination of transforming processes in the Greek cigarette industry and, probably, the broader cigarette manufacturing sector globally.

I have implemented the GPN theory in this chapter flexibly, considering that some compromises were necessary for its utilization as an analytical tool in earlier historical contexts. With this need for conceptual flexibility in mind, I have highlighted, first, the role that licensing agreements had in the penetration of new markets. Second, I have accounted for the dilemma between licens-

ing and stock acquisition as a reflection of the alternative strategies for lead firms expansion. Such firms often had to choose between the formation of heavily interconnected chains, or flexible networks.

Regarding the Greek cigarette industry, I have emphasized the intentional character of its transformation, which evolved in a competitive domestic market, without underestimating the impact of international pressures and trends in the transformative process. The ability of Global Production Networks to affect their environment, even before the contractual linkage with specific partners has been formalized, is also one of their significant features. Networks expand not only through the direct imposition of their rules, but also by forming patterns for imitation. Therefore, the potential partners of lead firms are in some cases proactive in formulating the preconditions and speeding up the process that eventually results in formal association.

Three central episodes of innovation, accompanied by other less observable shifts, prepared the participation of the national cigarette firms in the Global Production Networks. The manufacturing of hybrid cigarettes played a prominent role during this period, and was also observable in the negotiations over licensing agreements. In alignment with the earlier German pattern, the first blended cigarettes produced in Greece were characterized by a higher percentage of Oriental tobacco. During the following period, the Greek firms tried to partially adapt the international brands according to their special local needs, although with very limited success. Regarding the behavior of Greek smokers, the pace of conversion varied in the case of each new product. King-size cigarettes became popular within a short time span compared with filter cigarettes, and even more so with blended cigarettes, in which a kind of passive

resistance from below is observable. Other factors, such as the protective government policies for the producers of *esoterika* varieties, also contributed to the slow pace of the popularization of the American blend.

To conclude, we should consider the crucial role of technology in the whole transitional process. Technological equipment and the know-how accompanying it were some of the few inputs the Greek national chain of cigarette-making received from abroad. Those inputs accelerated the whole readjustment of the sector. The companies had spent significant sums to supply the necessary equipment and adjust their production to the requirements of the new products. In such circumstances, they had no alternative other than maximizing the return on their investment by making the best use possible of their machinery. Investing in technological equipment favored their adoption of international patterns and, consequently, their convergence with the emerging Global Production Networks.

The Establishment of EOK and State Economic Policy in the Postwar Greek Tobacco Sector

Dimitrios Stergiopoulos

The 1950s and 1960s are often described by some scholars as the era of the Greek economic miracle.¹ According to their analysis, during the 1940s, World War II, the occupation by the Axis powers, and the Greek Civil War between the leftist resistance and the monarchist government, debilitated almost completely the productive capacity of the

1. For two of the most prominent advocates of this understanding, see Chrisafis Iordanoglou (Χρυσάφης Ιορδάνογλου) *Η ελληνική οικονομία μετά το 1950, Τόμος Α', Περίοδος 1950-1973: Ανάπτυξη, Νομισματική Σταθερότητα και Κρατικός Παρεμβατισμός* (Athens: Τράπεζα της Ελλάδος, Κέντρο Πολιτισμού και Τεκμηρίωσης, 2020), 44-92. Also, Kostas Kostis (Κώστας Κωστής), *Ο πλούτος της Ελλάδας: η ελληνική οικονομία από τους Βαλκανικούς πολέμους μέχρι σήμερα* (Athens: Πατάκη, 1999), 360-415.

economy. However, in the following decades, the country was able to reduce the gap with the rest of Western Europe in terms of economic and social development. Central in this effort were the exports of tobacco leaves, which contributed 11.6% to the Gross Domestic Product (GDP) of the Greek primary sector.² In an economy with small potential to export industrial products, agricultural goods like tobacco, raisins, and olive oil allowed the Greek government to invest in the industrial and tourist sectors and diversify the economy.³

However, the global tobacco market had changed significantly since the interwar period, when Oriental tobaccos of the type that Greece produced were the sole ingredient for high-quality cigarettes. The first worrisome development was that the smoking public in Germany and the United States preferred cigarettes of the American blend type, which only contained 5-10% of Oriental tobacco. Moreover, Turkey, which was not one of the belligerents in World War II, had come to dominate Oriental tobacco exports.⁴ Last, almost all the central and eastern European countries that imported large quantities of Greek Oriental in the interwar period had established centrally planned economies under the guidance of the Soviet

2. “Εισηγητική έκθεση του Υπουργού Εμπορίου και αι συζητήσεις της επιτροπής εξουσιοδοτήσεως,” *Η Φωνή των Συντακτισμάτων*, June – September 1957, 3482.

3. Ministry of Cooperation, *Πενταετές Πρόγραμμα Οικονομικής Αναπτύξεως της Χώρας 1960-1964* (Athens: Υπουργείον Συντονισμού, 1960), 9; Apostolos Vetsopoulos, “Efforts for the Development and Stabilization of the Economy during the Period of the Marshall Plan”, *Journal of Modern Greek Studies* 27, no. 2, (2009), 282-284.

4. Rosemary Elliot, “Smoking for Taxes: The Triumph of Fiscal Policy over Health in Postwar West Germany, 1945–55.” *The Economic History Review* 65, no. 4 (2012): 1451-1452.

Union, and they were accessible only through clearing trade agreements.

The Greek government identified three potential solutions in order to restore Greek exports and finance its ambitious economic reforms. First, it focused on reestablishing the links between its tobacco sector and the international tobacco industries. Second, it complemented the income of the tobacco producers by establishing a new state organization; the National Tobacco Organization (*Ethnikos Organismos Kapnou*, EOK in its Greek acronym). Third, it encouraged the cultivation of other products which could be exported more easily.⁵ In this article, I focus on the first and second solutions, and examine the configuration of social forces that informed the establishment of EOK and the emergence of an elaborate apparatus of policies that supported the income of tobacco producers. Furthermore, I argue that, in the Greek context, such extensive and costly redistributive policies were extremely unusual in the conjuncture of the 1950s and 1960s.

THEORY AND METHODOLOGY

Economic geography and its neighboring disciplines have proposed a theoretical framework that can illuminate the actions of the Greek government. The theory of Global Production Networks (GPN) aims to explain how certain regions flourish in a globalized economy by becoming part

5. In Global Value Chain (GVC), this process is known as product upgrading. Peter Knorringa and Lee Pegler, "Globalisation, Firm Upgrading and Impacts on Labour" *Tijdschrift voor economische en sociale geografie* 97 (2006): 470-479.

of production networks centered around powerful private companies known as lead firms.⁶

*GPN analysis suggests that economies of scale and scope embedded within specific regions are advantageous to those regions—and bring about regional development—only insofar as such region-specific economies can complement the strategic needs of lead firms in global production networks.*⁷

However, development also necessitates that some value should be captured by the actors stationed in this region. So, with the help of GPN, we can identify what kinds of policies the Greek state pursued in order for tobacco producers and other farmers to maximize the value that they captured while they participated in global production networks. The processes of a region's strategic coupling, decoupling, and recoupling, as well as the processes of value production and capturing are of particular interest because they describe the role that a region and its economic actors have in the production of a specific commodity. My focus on a commodity, instead of a lead firm, would make someone think that the theoretical frameworks of Global Value Chains (GVC) or Global Commodity Chains (GCC) might be more applicable to this particular case study. However, GPN allows me to examine a broader spectrum of economic actors, including the state itself, in the context of a globalized economic (world) system. Furthermore, examining the relationship between the upstream providers

6. Neil M. Coe and Henry Wai-Chung Yeung, *Global Production Networks: Theorizing Economic Development in an Interconnected World* (Oxford: Oxford University Press, 2015), 1.

7. Coe and Yeung, *Global Production Networks*, 19-20.

in a given production network and the state can also help us understand their connections with the lead firms.

The World System Analysis paradigm, where GCC and GPN theories originated, had first posed that there is more than one way that a region can be integrated into the global economy. One of the most common configurations includes a region that provides raw materials, while manufacturing takes place in a developed economy. Afterwards, the final product might be exported or consumed where it was manufactured, while the region that provides the raw material might also import the finished goods. This pattern describes quite accurately the initial integration of the Balkans into the expanding capitalist world economy, with tobacco exports forming one of the main links between the two loci.⁸

GPN describes the processes through which these geographically differentiated roles come together as strategic coupling. Strategic coupling happens through the connections established between the lead firm, state institutions, and social actors in the various regions. The needs of the lead firm should be met in order for a production network to expand into a region, while state institutions, with the help of social actors, are responsible for enhancing the value that is captured within that region. Although state, labor, and business can be quite antagonistic towards each other, they also need to form a cooperative relation.⁹

8. For the latest contribution by Emmanuel Wallerstein, the main theorist of World System Analysis, see *The Modern World System IV: Centrist Liberalism Triumphant, 1789-1914* (Berkeley: University of California Press: 2011).

9. Yong-Sook Lee, Inhye Heo & Hyungjoo Kim, "The Role of the State as an Inter-Scalar Mediator in Globalizing Liquid Crystal Display Industry Development in South Korea" *Review of International Political Economy* 21, no. 1 (2014): 105-106.

Yeung's definition of strategic coupling emphasizes its cooperative nature. He conceptualizes it as a "mutually dependent and constitutive process involving shared interests and cooperation between two or more groups of actors who otherwise might not act in tandem for a common strategic objective."¹⁰

Even if GPN theorists did not originally pay as much attention to the state, lately state policies are seen as instrumental for the coupling of the different loci of production and consumption.¹¹ Moreover, these scholars recognize that the kind of capital accumulation that a state will pursue is a product of the struggles that occur within the state, as well as between the state and its people.¹²

As Selwyn.. has argued, 'states engage in building institutions designed to structure the behaviour of their citizens, to simultaneously reproduce state power and guarantee the process of capital accumulation based upon the sale of labour power to capital'. A strategic-relational understanding of the state therefore means that it is not sufficient to focus on state policy in the changing governance of industrial activity per se – the primary focus of a good deal of GCC and GVC work on the state – or on an instrumental reading of the state's role in the reproduction of capital. Rather, a strategic-

10. Henry Wai-Chung Yeung, "Regional Development and the Competitive Dynamics of Global Production Networks: An East Asian Perspective," *Regional Studies* 43, no 3 (2009): 325–51, cited in Lee et al, "The Role of the State," 106.

11. Neil M. Coe and Henry Wai-Chung Yeung, "Global Production Networks: Mapping Recent Conceptual Developments" *Journal of Economic Geography* 19 (2019): 779.

12. Adrian Smith, "The State, Institutional Frameworks and the Dynamics of Capital in Global Production Networks" *Progress in Human Geography* 39, no. 3 (2015): 298.

*relational reading of the state requires attention to the configuration of social forces underpinning state support for particular policy directions, and how state hegemonic projects provide the basis for accumulation strategies, of which GPNs form one important component.*¹³

In the case of postwar Greece, the state had to decide which strategy of capital accumulation to pursue with the scarce capital obtained from tobacco exports and American aid. To make sense of the state's decision to support the income of its tobacco producers through EOK in the 1950s, we need to identify the configuration of social forces that encouraged such policy. Greece took the path of exportism, one of the most relied-on forms of capital accumulation and integration into the world economy, one in which export levels often stand for the success of the state's developmental policies. A fully integrated export-oriented economy is one possible variation of exportist developmental policies, while this orientation can also be combined with policies of import-substitution.¹⁴ Since the debate in the 1940s between Kyriakos Varvaressos and Xenophon Zolotas, two of the most prominent Greek economists, an export-oriented, fully-integrated Greek economy was embraced by conservative, liberal, and social-democratic politicians.¹⁵ However, it was not immediately as clear whether agricultural exports were a viable strategy of capital accumulation. Open questions were also how fast Greece had

13. Smith, "The State, Institutional Frameworks" 299.

14. Smith, 300.

15. George Politakis, *The Post-War Reconstruction of Greece: A History of Economic Stabilization and Development, 1944-1952* (New York: Palgrave Macmillan, 2018), 49-50, 260-261, 264.

to transition to an economy specializing in manufacturing and tourism, or whether its orientation towards exports should be combined with a program of import substitution.

In some ways, the path that Greece eventually took towards capital accumulation and integration with the world economy resembles the developmental bureaucratic states of East Asia.¹⁶

As Cumings... has argued in his 'developmental state' conceptualization of the East Asian BAIR [Bureaucratic-Authoritarian Industrializing Regime] model, state-led development is characterized by: relative state autonomy, central coordination, bureaucratic short- and long-range planning, high flexibility in moving in and out of industrial sectors, private concentration in big conglomerates, exclusion of labor, exploitation of women, low expenditures on social welfare and, in prewar Japan and contemporary South Korea and Taiwan, militarization and authoritarian repression.¹⁷

The parallels between postwar Greece and the east Asian developmental bureaucratic model are apparent despite the much less spectacular results of Greek industrialization programs.¹⁸ The more mixed accomplishments of postwar Greece might have been repeated in the case of North Africa's integration into the EU's economic sphere of influence since the 1990s. In Tunisia, "despite a solid growth performance in 2003–2010 poverty levels rose, income inequality widened and unemployment rates re-

16. Lee et al, "The Role of the State," 107. B. Cumings, "The origins and development of the Northeast Asian political economy: Industrial sectors, product cycles, and political consequences." *International Organization* 38, no. 1: 1–40.

17. Smith, "The State, Institutional Frameworks," 301.

18. Lee et al., "The Role of the State," 107.

sponded poorly to economic growth”¹⁹ The understanding of the state as facilitator of economic connections between a region and the world market can be related to the period that the GVC, GCC and GPN theories were originally conceived for. In the 1990s and 2000s, under the auspices of the World Trade Organization (WTO) and International Monetary Fund (IMF), countries in the Global South transitioned from state-centered, import-substituting industrialization to export-oriented, investment-driven economic growth. This conjuncture also explains why trade policy has been the primary focus of all these theories.²⁰

The focus on export-oriented and investment-driven economic growth corresponds really well with the economic principles according to which Greece planned to accelerate its economic development after World War II.²¹ Therefore, by studying these trade policies, I can identify how Greece tried to restore its links to the global production networks of the tobacco lead firms and maximize the value captured by its producers. In this context, an essential metric of the power between a lead firm and the state is the presence of region-specific assets.²² Oriental tobacco, a rare crop in the sense that it only grows in one region of the planet, remained a necessary ingredient for the most popular cigarette after WW2: the American blend type. The relative scarcity of Greece’s asset (i.e., its capacity to grow Oriental tobacco) made the power balance between Greece and the lead firms in tobacco manufacturing less unequal than one

19. Smith, “The State, Institutional Frameworks,” 304

20. Rory Horner, “Beyond Facilitator? State Roles in Global Value Chains and Global Production Networks,” *Geography Compass* 11, no. 2 (2017): 3.

21. Coe and Yeung, *Global Production Networks*, 3, 33, 84.

22. Horner, “Beyond Facilitator?” 5.

might think, given the small size and backwardness of the Greek economy at the time. The power imbalance in favor of the transnational firms did exist, nonetheless.

From the very beginning, the mass-produced cigarette had been a transnational commodity. Starting in the early 1900s, however, a number of countries raised tariffs on cigarettes, taking advantage of nicotine's addictive properties. It was morally acceptable to tax an addictive item, while monitoring cigarette taxation was quite easy with the banderole (sticker) system. These developments led to the manufacturing of cigarettes in the country of consumption, using leaves imported from tobacco-growing countries. As a result, tobacco products became, and have remained to this date, part of local, regional, national, or global production networks created by tobacco lead firms owned privately or by the state.²³

In addition to processes of increased connectivity, the GPN literature has also studied the potential ruptures that might partially isolate a region from global markets. The literature has located the causes for such outcomes, which it calls *decoupling*, in either the decisions of lead firms, or in broader market conditions.²⁴ I argue that the inability of Greece to export its tobacco in the 1950s can be understood as the decoupling of northern Greece from the international production networks of the tobacco lead firms. The Greek state addressed this problem by recoupling its tobacco-growing areas to tobacco GPNs, but also by coupling them to other GPNs. As part of the process of recoupling, the establishment of EOK by the Greek state made it possible

23. Nicole D. Breazeale, "The Impact of Pressure Groups on Inter-Firm Competition in Cigarette-Manufacturing sector: A Global Value Chain Approach," *Competition & Change* 20, no. 4 (2016): 279.

24. Coe & Yeung, *Global Production Networks*, 169-170.

for some additional value to be captured by economic actors in Greece (merchants, producers, domestic cigarette manufacturers). This was achieved by redirecting towards them some of the wealth that the Greek economy attracted in the form of hard currency. Such a policy was essential in order to sustain the link between the tobacco producing regions in northern Greece and the global production networks.

At the same time, the state relied on tobacco exports in order to finance economic policies aiming at diversification into industry and tourism. In other words, it also had to funnel part of the wealth away from the tobacco sector so as to diversify the economy and develop the industrial and tourist sectors. Furthermore, the expansion of the agricultural sector in areas other than tobacco production, even though agriculture was not seen as the most dynamic activity, could absorb some of the underemployed Greek labor force. These hopes were apparent in the five-year economic plan of 1960. The Greek economy was expected to grow by 6.3% annually and tobacco exports only by 2.85%. Moreover, tobacco exports were to grow at a lower rate than the exports of other products (fruits, vegetables, cotton, dairy products).²⁵ I now turn to discussing each of these solutions separately.

FIRST SOLUTION: RECOUPLING

The first set of policies revolved around the recoupling of the Greek tobacco sector to the global production networks

25. Ministry of Cooperation, *Πενταετής Πρόγραμμα Οικονομικής Αναπτύξεως της Χώρας 1960-1964*, 31-32; Centre of Planning and Economic Research (Κέντρον Προγραμματισμού και Οικονομικών Ερευνών), *Σχέδιο προγράμματος οικονομικής ανάπτυξεως της Ελλάδος (1966-1970)* (Athens: Κέντρο Προγραμματισμού και Οικονομικών Ερευνών), 5.

of the tobacco industries, while increasing leaf exports. Otherwise, Greece could face massive social problems and lose valuable hard currency, while Turkey and Bulgaria would consolidate their position in the global market for Oriental tobacco.²⁶

In the aftermath of the war, exports to the United States were the most important for Greece, even if they were not always the most voluminous. US tobacco companies bought the two top qualities of tobacco, and set the prices for the III and IV grade of tobacco that was absorbed by European and domestic markets.²⁷ Overall, Greece exported 80.7% of its tobacco to the Western World and the Middle East, and 13.20% to Eastern Europe. Besides the US, the main importing countries were West Germany, Austria, Sweden, Switzerland, Italy, Egypt, the Netherlands and Belgium. However, these countries had quadrupled their imports of US Virginia since the interwar period. While in Germany, 96% of the cigarettes had contained only Oriental before World War II, in the late 1950s the figure went down to 14%. In contrast, the cigarettes with European blend occupied 40% of the market, and filtered cigarettes 42%.²⁸ Furthermore, the United States financed their tobacco exports to Europe through the Marshall Plan. Essentially, this allowed the European countries to import Amer-

26. Tobacco Merchant Federation of Greece (Καπνεμπορική Συνομοσπονδία της Ελλάδος), *Μελέτη περί της θέσεως των ελληνικών καπνών εις την παγκόσμιαν καπνικήν κίνησην και της δυνατότητος διευρύνσεως της εξαγωγής των* (Athens: Καπνεμπορική Ομοσπονδία Ελλάδος, 1958), 17.

27. Nikolaos Patras (Νικόλαος Πάτρας), *Καπνική Οικονομία και Καπνική Πολιτική* (Thessaloniki: 1954), 39.

28. Tobacco Merchant Federation of Greece, *Μελέτη περί της θέσεως των ελληνικών καπνών*, 14-15, 18, 22.

ican tobacco and pay with their own currency instead of using their precious dollar reserves. For the United States, the European market had become even more important after the Chinese revolution in 1949, when American exports stopped completely.²⁹ This was also a period of constant growth in the consumption of cigarettes. The European and Middle Eastern countries that imported Greek tobacco increased their production by 2.5 to 10% annually. Under these circumstances, a viable scenario in the short run was that Greek exports preserve their market share by keeping up with the pace of growth of cigarette manufacturing.³⁰ However, this was not achieved, as Greece's market share decreased.

Essential for the recoupling was a series of trade agreements signed in the 1950s. In 1949, bilateral trade with West Germany started again, while the trade agreement of 1950 led to further increases. Soon, West Germany was again the top importer of Greek tobacco. However, it took a while for German imports to reach their interwar level of 25,000 tons per year. The economic relations between the two countries were based on German companies supplying capital goods and raw materials for public works and the industrial infrastructure in Greece, while Greece would be the main supplier of tobacco in Germany. The changes in smoking habits that I discussed above meant that the German government had to press the German tobacco industries to import Greek Oriental; this was one of the main reasons that the European blend contained more Oriental than the American blend. In the same period, Turkey also signed

29. Patras, *Καπνική Οικονομία*, 63.

30. Tobacco Merchant Federation of Greece, *Μελέτη περί της θέσεως των ελληνικών καπνών*, 20-22.

a trade agreement with Germany which led to exports of 35,000 tons of Turkish Oriental in the next three years.³¹

With the trade agreement of 1957, the Soviet Union became one of the largest importers of Greek Oriental, while similar agreements increased exports to Hungary, Poland and Czechoslovakia.³² Greece and Turkey also pressed Great Britain to import Oriental; British manufacturers had used exclusively Virginia tobacco since World War I. Between 1947 and 1956, the British government forced its tobacco industries to include 2-5% of Oriental in their cigarettes.³³ Moreover, the massive trade deficit of Great Britain to the United States after the war created an incentive to decrease imports of US Virginia, and to substitute it with Oriental and flue-cured tobacco from the (former) colonies.³⁴ Still, British smokers never developed a preference for the American blend, and once the government mandate disappeared, British imports of Oriental became negligible again. In such a context, Greece could not significantly penetrate a market that imported more than 140 thousand tons per annum. Had Great Britain adopted the American blend and its cigarettes contained 5% of Oriental, it would have had to import 7000 tons of Oriental and become the

31. Patras, *Καπνική Οικονομία*, 70, 79-80; Dimitrios K. Apostolopoulos, "Greece and Germany in Postwar Europe: The Way towards Reconciliation," *Journal of Modern Greek Studies* 21, no. 2 (2003): 229-231.

32. Tobacco Merchant Federation of Greece, *Μελέτη περί της θέσεως των ελληνικών καπνών*, 22-23; "Η Νέα Οικονομική Συμφωνία," *Οικονομικός Ταχυδρόμος*, 31 January 1957, 3.

33. The Monopolies Commission, *Report on the Supply of Cigarettes and Tobacco and of Cigarette and Tobacco Machinery* (London: Her Majesty's Stationery Office, 1961), 25.

34. Joseph W. Hines, "Recent Trends and Developments in the Flue-Cured Tobacco Export Trade," *Southern Economic Journal* 18, no. 3 (1952): 385-386.

second most important market in Europe. Fortunately, the global appeal of the American blend led to the opening of new markets. For instance, Japan was importing 3000 tons of Greek Oriental per annum by the mid-1960s.³⁵

Initially there were grand expectations for the 1961 Association Agreement between Greece and the European Economic Community (EEC). In the 1950s, there were two initiatives in unifying the economies of non-communist Europe: EEC and the European Free Trade Agreement (EFTA). Greece was initially part of the latter, which involved looser ties among its members. However, EFTA's focus on industrial products, and the exception of agricultural goods from its arrangements, led Greece to sign an agreement with EEC.³⁶ Greece hoped to increase significantly its EEC exports and improve its balance of payments.³⁷ More than 50% of Greek tobacco exports were going to EEC states, while the Community aimed to protect agricultural production with import tariffs. Thus, Greece would have faced considerable obstacles to export its tobacco in the absence of an agreement. Import tariffs on Greek tobacco were reduced by 50% in 1961, and abolished altogether in 1968. France and Italy guaranteed that they would continue to import the same amount of Greek tobacco, while the EEC could not reduce its general import tariffs on tobacco for 12 years.³⁸ However,

35. Thalís Andreadís (Θαλής Ανδρεάδης), *Σκέψεις γύρω από το σύγχρονο πρόβλημα του ελληνικού καπνού* (Athens: 1967), 23, 29.

36. “Δύναται να εξουδετερωθούν οι δυσμενείς συνέπειαι εκ της συμμετοχής της Ελλάδος εις την ελευθέραν ζώνην,” *Οικονομικός Ταχυδρόμος*, 6 June 1957, 16.

37. Ministry of Coordination, *Πενταετές Πρόγραμμα*, 41.

38. S. G. Triantis (Σ. Γ. Τριάντης), *Κοινή αγορά και οικονομική ανάπτυξις: Η Ελλάδα και η ΕΟΚ* (Athens: Κέντρο Προγραμματισμού και Οικονομικών Ερευνών, 1967) 139-142.

these import tariffs did not significantly affect the demand for Greek Oriental. They represented a small part of a cigarette's final price, while Turkey and the United States enjoyed similar benefits in their tobacco exports.³⁹ Exports to Eastern Europe might have been a promising alternative, but the Association Agreement limited the potential of Greece to import raw material and industrial products from these countries through clearing agreements. Moreover, exporting large quantities of Greek tobacco to Eastern Europe through clearing arrangements entailed the danger of allowing these countries to reexport this tobacco to the United States or Western Europe at below-market prices using dumping tactics.⁴⁰ Overall, Greece could not expect to increase its tobacco exports more than 1-1.5% annually over the following decade.⁴¹ The meager prospects for Greek tobacco exports were apparent in the five-year economic plan of 1965, where it was projected that total production (i.e., for exports and the domestic market) would remain the same, 132,000 tons, until 1970.⁴² Thus, the gradual increase of consumption would fully absorb the existing production volumes.

EOK also encouraged the cultivation of varieties that were preferred by the smoking public and the tobacco lead firms. However, this required the producers to build the

39. Nikolas Momferatos (Νικόλας Μομφεράτος), "Δεν συμφέρει η συμμετοχή της Ελλάδος εις την Ε.Ζ.Ε.Σ.," *Οικονομικός Ταχυδρόμος*, 12 December 1957, 5.

40. "Η ίση μεταχείρισις των αποθεμάτων," *Καπνική Επιθεώρησις* 158, (January 1960): 3254.

41. Triantis, *Κοινή αγορά και οικονομική ανάπτυξις*, 139-142.

42. Centre of Programming and Economic Research, *The Plan 1966-1970*, 207-208.

appropriate facilities for the air-curing of Burley-type tobacco, and the flue curing of Virginia. Burley originated in the US and was used in the American blend. Expanding into this market looked a promising answer to the increasingly weak demand for Oriental.⁴³ Burley cultivation started in 1959. By 1966, 6,000 tons were being exported annually. However, the demand for Burley was not so strong and Greece could not aim to export more than 10,000 tons in total. Similarly, the demand for Greek Virginia was quite weak as well. Zambia, Malawi, and Zimbabwe cultivated it extensively at low cost, and could undersell Greece and the US.⁴⁴

The last measure aiming at a recoupling with global production networks was to facilitate the access of domestic tobacco merchants to cheap capital through bank loans. In the 1950s and 1960s, the capital market was under the tight control of the state, which required commercial banks to lend to specific sectors of the economy, including the tobacco merchants, even if they were not the most profitable investments. Merchants used certificates of future purchases as collateral for these loans, which covered 75% of the capital and were to be repaid after the merchant sold the tobacco. This favorable treatment was in part due to the direct access that the merchants had to the highest echelons of power. They were represented by the Federation of Tobacco Merchants (*Kapnemporiki Omospondia Ellados*, KOE in its

43. Centre of Programming and Economic Research, *Μελέται πενταετούς προγράμματος: γεωργικά επιδοτήσεις* (Athens: Κέντρον Προγραμματισμού και Οικονομικών Ερευνών, 1966), 162-163.

44. Andreadis, *Σκέψεις γύρω από το σύγχρονο πρόβλημα*, 42-43, 45-46; “Η καλλιέργεια των Μπέρλεν κατά το έτος 1964,” *Καπνική Επιθεώρησης* 208, (March 1964): 4410.

Greek acronym), which was regularly consulted by two government organs responsible for state economic policy, the Monetary Committee and the Governmental Tobacco Committee. Moreover, Vasileios Thasitis, editor of KOE-friendly magazine *Kapniki Ēpitheorisis*, often advised the government on tobacco-related matters. His articles enjoyed a wide readership, as they appeared in all the major newspapers (*Kathimerini*, *Oikonomikos Tachydromos*).

SECOND SOLUTION: EOK

Overall, the most important initiative of the Greek government in this period was to directly support the income of tobacco growers. In GPN terminology, the state understood that they needed to capture a minimum amount of value for Greece to remain linked to the production networks of the tobacco lead firms. A well-known aspect of economic integration is that economic actors producing a given commodity often capture a very small amount of the product's final value.⁴⁵ The gradual deployment of a variety of state policies, with the establishment of EOK in the forefront of this process, reveals the state's active role in facilitating the process of value capturing. These policies stopped only in the 1990s, when the EU's Common Agricultural Policy (CAP) stopped encouraging tobacco production.⁴⁶

In a general sense, state intervention is more often than not necessary in the market for agricultural products. Due

45. Coe and Yeung, *Global Production Networks*, 171-172.

46. Napoleon Maravegias (Ναπολέων Μαραβέγιας), *Η συμφωνία της GATT και οι επιπτώσεις της στην ελληνική γεωργία* (Athens: Αντ. Σάκουλας, 1998), 95-98.

to factors specific to agricultural production, the laws of demand and supply do not function as efficiently in sustaining it as an economically viable activity.⁴⁷

*It follows that, because of these two supply elements, for example, weather and diseases, the actual quantity supplied typically and inevitably differs from the planned quantity supplied. In addition, prices will play their clearing function in equating the quantity demanded with the actual quantity supplied, albeit this will happen only up to a certain extent. If for example a market is characterized by an exceptionally good year, prices will decrease, but demand will not increase accordingly (or proportionately), because of the price and income inelasticity characterizing many agricultural markets (...).*⁴⁸

In addition to the unforeseeable effects of weather conditions and other factors, there is the issue of time and prices, which has inspired the cobweb model in economics. Farmers plan their agricultural production based on their observations of prices at the time of planting. Then, a certain amount of time passes before the product reaches the market. By then, market prices will have changed. Under these circumstances, there was the chance that tobacco production could stop altogether in postwar Greece in the absence of state intervention. In northern Greece, in the 1950s, one third of the population relied on tobacco for its livelihood, while the villagers had to be assuaged for political and social reasons.⁴⁹ A large part

47. Patras, *Καπνική οικονομία*, 36, 177.

48. Bernadette Andreosso-O' Callaghan, *The Economics of European Agriculture* (Basingstoke: Palgrave Macmillan, 2003), 55-56.

49. Eleftherios Skandalis (Ελευθέριος Σκανδάλης), *Ο καπνός εν τω πλαισίου της γεωργικής οικονομίας της βορείου Ελλάδος* (Athens: Βιβλιοθήκη της Εμπορικής Τράπεζας της Ελλάδος, 1960), 68.

of the tobacco producers lived close to the borders with Albania, Yugoslavia, Bulgaria and Turkey; the tobacco producing areas had been at the core of the insurgency by the communists in 1946-1949, and many tobacco growers belonged to the Muslim minority. These circumstances connected the fate of the tobacco sector to a series of thorny political issues, especially in the context of the Cold War.

From the 1950s until the 1980s, an elaborate apparatus of policies emerged. Until 1957, the precursor of EOK, called the Autonomous Office for Greek Tobacco (*Aftonomos Organismos Ellinikou Kapnou*) was tasked with disseminating more advanced techniques for the cultivation and curing of tobacco, and helping producers to diversify their incomes.⁵⁰ In contrast, the new organization was responsible for absorbing the unsold tobacco stocks directly from farmers, and setting the limits of how much land could be cultivated with tobacco. The former became one of the most effective policies of income redistribution for the producers.⁵¹ This policy also came into sharp contrast with the overarching economic policy of the government. Balancing budgets and financing part of the public investments from the tax income was its main focus, so as to maintain a stable exchange rate between the drachma and the US dollar.⁵²

The activism of the agrarian cooperativist movement, organized around the Panhellenic Confederation of Ag-

50. “Απεφασίσθη η διάθεση ποσού 25,2 εκατομμυρίων δραχμών δια το πρόγραμμα εκτάκτου ενισχύσεως καπνοπαγωγών,” *Οικονομικός Ταχυδρόμος*, 14 March 1957, 16.

51. *Centre of Programming and Economic Research, Μελέται πενταετούς προγράμματος*, 15.

52. “Η κακή κατανομή του εθνικού εισοδήματος,” *Οικονομικός Ταχυδρόμος*, 1 August 1957, 1.

ricultural Cooperatist Unions (*Panellinia Synomospondia Enoseon Georgikon Synetairismon*, PASEGES in its Greek Acronym) contributed to the redistributive policies of EOK. The state itself had supported cooperativism as an alternative to small and medium-sized agriculture. Local and regional cooperative unions could secure cheaper access to capital, undertake large-scale investments, and achieve economies of scale. This was already happening in the French primary sector, which had embrace the cooperative paradigm.⁵³ The leaders of the cooperative movement, such as Vasileios Ilantzis, served as spokespersons for the farmers. They argued that the state or the cooperative unions should establish a monopoly which would be responsible for exporting tobacco and supplying the domestic market, because the tobacco producers could not cover their needs with market prices.⁵⁴ Alternatively, these leaders asked for the Cooperative Union of Tobacco Farmers of Greece (*Synetairistiki Enosis Kapnokalliergiton Ellados*, SEKE in its Greek Acronym), a company established in 1949 by the cooperative unions which specialized in tobacco exports, to function as a state monopoly. In any case, these demands were never fulfilled, and the tobacco market remained under the control of the private sector.⁵⁵ Interestingly, the establishment of SEKE in 1949 had been supported by the conservative political party despite the

53. Georgios Stamatopoulos (Γεώργιος Σταματοπουλος), *Αι αποθηκευτικαι εργασιαι των γεωργικων συνεταιριστικων οργανωσεων* (Athens: 1948); Centre of Programming and Economic Research, *Μελέται πενταετούς προγράμματος*, 32-33; Ministry of Coordination, *Πενταετής Πρόγραμμα*, 32.

54. Vasileios Ilantzis (Βασίλειος Ιλαντζής), *Σ.Ε.Κ.Ε. και καπνός. Χρονικόν συνεταιριστικής δημοουργίας* (Athens: Τσαϊλάνης, 1973), 53-57.

55. "Αι απόψεις των οργανωμένων καπνοπαραγωγών," *Καπνική Επιθεώρησης* 42-43, (April-May 1950): 660.

strong links between PASEGES and the liberal centrist parties.⁵⁶ In 1965, 75% of the Greek farmers were members of cooperative unions, but the activities of most organizations was limited to providing cheap loans to individual farmers. Only around one third worked on the joint marketing of agricultural products.⁵⁷

Placating the unhappy producers was one of the main concerns for the establishment of EOK in August 1957. However, this was no straightforward process. The bill establishing the new agency made its first appearance in January 1957, but it was withdrawn due to the fierce reaction by the tobacco merchants. It reappeared in the summer of 1957, when it did get passed. We can therefore assume that the bill, or at least the initiative more generally, had been discussed in government circles for more than a year. The crisis in the spring and summer of 1956, when large quantities of tobacco remained unsold, was probably instrumental in pushing this legislative measure forward. Future Director General of EOK, Thalís Andreadis was among the authors of the new law.⁵⁸ Since the early 1950s, the government had considered establishing a company to buy and sell any redundant quantities of tobacco, but this did not occur until 1957. During parliamentary deliberations, 31 deputies spoke about the bill and almost all of them supported the decision of the state to regularly intervene in the tobacco market. Only 2 deputies adopted the position of the merchants, who argued that the new organization would undermine tobacco exports because it would raise

56. Ilantzis, *Σ.Ε.Κ.Ε. και καπνός*, 86-87, 104.

57. Ministry of Coordination, *Πενταετής Πρόγραμμα*, 196.

58. Andreadis, *Σκέψεις γύρω από το σύγχρονο πρόβλημα*, 57, 104-105.

the prices and lower the quality of the produce. Interestingly, the deputies from the governing conservative party also supported the bill, even though their party tended to represent business interests. This contradiction was also mentioned by the conservative deputy, D. Thanopoulos, who introduced the bill to the parliament.⁵⁹

EOK would follow the guidelines of the 1956 state intervention, which had been conceived by Andreadis.⁶⁰ The excess tobacco was to be bought at prices lower than those offered by the merchants. Initially, EOK outsourced its purchasing operations, as it did not have the necessary personnel or expertise to undertake this task. Some years later, EOK was able to buy large quantities of tobacco without relying on intermediaries, using its newly hired personnel, instead. Despite the fierce opposition of the merchants, the new role of EOK was embraced by most state officials and politicians. EOK not only intervened in the market, but also promoted farming methods that ran contrary to the established wisdom. For example, moderately irrigating the tobacco plants would not harm their quality; instead, it would produce a higher yield with neutral taste and low levels of nicotine. The law that established EOK also increased the fines for producers who did not package their tobacco according to the guidelines established for the sake of guaranteeing a high quality for Greece's most important export commodity. EOK performed all these functions, because the merchants did not offer higher prices to producers who packaged their tobacco properly; they claimed

59. "Οι αντιπρόσωποι των Ενώσεων Γεωργ. Συν/σμών των καπνοπαραγωγικών περιφερειών Μακεδονίας, Θράκης, Θεσσαλίας, Στερεάς Ελλάδας και Νήσων", *Η Φωνή των Συνεταιρισμών* 143-146, (June – September 1957): 3481-3483.

60. Law 578/ 1956, *Εφημερίς της Κυβερνήσεως*.

that they had to buy tobacco fast, and there was no time to thoroughly check the tobacco bales.⁶¹ In other words, market forces alone could not guarantee the long-term sustainability of high quality.

PASEGES wholeheartedly supported the bill, while several MPs reproduced its arguments in parliament. PASEGES asked, for instance, that the merchants and domestic cigarette manufacturers should not be represented in EOK's Board of Directors, as the new agency was to directly compete with them. Instead, the Board should be controlled, PASEGES demanded, by representatives of the farmers' interests. Another demand was that EOK should intervene in the market only through local agricultural cooperatives.⁶²

From the standpoint of PASEGES, the unprecedentedly interventionist attitude of the state that EOK was to embody was perfectly justified. When the tobacco trading season started each December/January, newspapers would publish plenty of stories about merchants offering artificially low prices to producers, while they employed all kinds of tricks so as not to pay what they had agreed.⁶³ One of the most common was to initially reject buying the tobacco at the prearranged price, claiming that its quality was really low, to return later on and to offer lower prices.⁶⁴ The state intervention in the tobacco market was also necessary in

61. Andreadis, *Σκέψεις γύρω από το σύγχρονο πρόβλημα*, 42, 57-58, 102-103.

62. "Παρατηρήσεις επί του νομοσχεδίου περί εθνικού οργανισμού καπνού», *Η Φωνή των Συνεταιρισμών* 140, (March 1957): 3436-3437.

63. "Το καπνεμπόριο άρχισε να εκβιάζει τους καπνοπαραγωγούς της Πιερίας», *Μακεδονία*, 17 January 1959, 5.

64. "Περί το νέον νομοσχέδιον ιδρύσεως οργανισμού καπνού», *Οικονομικός Ταχυδρόμος*, 23 May 1957, 13.

order to protect the producers from the propaganda of the merchants who, shortly before the opening of the tobacco purchases, argued that the year's harvest was of bad quality, and that producers should not expect a high price for it.⁶⁵ For the sake of expediency and flexibility, PASEGES demanded that EOK have the authority to decide when to intervene in the market instead of relying on the Governmental Tobacco Committee for this. The Committee was charged with supervising the new organization. It had been established to address the lack of cooperation between the multiple state organs responsible for tobacco. Until the establishment of EOK in 1957 and the institutionalization of state intervention in the tobacco market, the pursuit of *ad hoc* policies, usually after a problem had appeared, had been the government's most common attitude.⁶⁶

The main opponents to PASEGES' proposals were the tobacco merchants and the representatives of their interests, KOE and *Kapniki Epitheorisis*. KOE made its position clear with the publication of a short study on the problems that the tobacco trade had encountered since the end of the civil war in 1949. One of its main points was that the growing popularity of American-blend filter cigarettes could help the exports of Greek Oriental: Their more neutral taste and aroma was a good fit for the Greek product, it explained.⁶⁷ However, in order for this promising future to become reality, the study warns, Greek tobacco would have to compete in price with the Oriental tobacco from Turkey and Bulgaria. Cigarettes with a filter did not need to

65. Andreadis, *Σκέψεις γύρω από το σύγχρονο πρόβλημα*, 34.

66. Patras, *Καπνική Οικονομία*, 164.

67. Tobacco Merchant Federation of Greece, *Μελέτη περί της θέσεως των ελληνικών καπνών*, 20-21.

contain high-quality Oriental tobacco, as had been the case with the unfiltered cigarettes popular in Central Europe in the interwar period. For this reason, Greek Oriental tobacco exporters would not be able to remain competitive on the basis of higher quality alone.⁶⁸ A policy that would enable farmers to secure higher prices on the market would, in conclusion, make Greek tobacco less competitive downstream in the commercial chain.

The KOE report argued that the establishment of EOK would further affect the balance between price and demand. Moreover, nepotism would lead the new organization to give artificially high price floors, in order to serve the “narrow” interests of the producers, instead of following the prices set by the market. Thus, the producers would refuse to sell their produce to the merchants, due to EOK’s higher prices. Additionally, if EOK regulated the opening and closing of tobacco transactions, this would limit the ability of the merchants to make deals after the closing of the market and reduce the potential of Greek tobacco to be exported. Overall, they argued that there was not an essential reason for the state to intervene in the tobacco market through EOK.⁶⁹ In line with the other measures that KOE proposed to make Greek tobacco competitive, the report called for the flexibilization of rules on who could be hired as tobacco leaf packers.⁷⁰ It also pointed at high banking

68. Centre of Programming and Economic Research, *Μελέται πενταετούς προγράμματος*, 87.

69. Tobacco Merchant Federation of Greece, *Μελέτη περί της θέσεως των ελληνικών καπνών*, 25-27. “Το ισοζύγιον και η καπνική μας πολιτική,” *Οικονομικός Ταχυδρόμος*, 25 April 1957, 12.

70. Tobacco Merchant Federation of Greece, *Μελέτη περί της θέσεως των ελληνικών καπνών*, 27-28; Law 2348/1953, *Εφημερίς της Κυβερνήσεως*. Patras, *Καπνική Οικονομία*, 40-41.

fees, interest rates, taxes, as well as convoluted bureaucratic procedures as important factors that ate into profit margins and depressed the market.⁷¹ Another example of the media campaign against state intervention to push up farmer incomes came in the form of an interview with Rudolf Schenker, CEO of German cigarette manufacturing giant, Reemtsma. Schenker reiterated KOE's warning that the new agency would undermine exports due to the lower quality of the produce. He used as an example the US, where the quality of the yield had decreased significantly since the state guaranteed the purchase of unsold quantities based on price floors.⁷²

For the merchants, the solution to the diminishing market share of Greek exports had to include an increase in the crop yield, the modernization of cultivation methods, the improvement of the quality of the cured tobacco leaves, the cultivation of varieties with higher demand, and the introduction of other cultivars.⁷³ The state had also to protect the "Greek character" of the tobacco sector by not allowing the direct presence of foreign companies or the establishment of a state monopoly. Lastly, even KOE recognized that the state might have to support the income of the producers when the yield was particularly high or the demand very weak. This could be accomplished by buying

71. Tobacco Merchant Federation of Greece, *Μελέτη περί της θέσεως των ελληνικών καπνών*, 29-31; Legislative Decree 3223/ 1955, *Εφημερίς της Κυβερνήσεως*, Patras, *Καπνική οικονομία*, 28.

72. "Η γερμανική σιγρεττοβιομηχανία κρίνει ασύμφορον την παρέμβασιν του κράτους εις την αγοράν του καπνού," *Οικονομικός Ταχυδρόμος*, 30 May 1957, 16.

73. "Επιβάλλεται εξυγιάνσις του κόστους και βελτίωσις των όρων αποδοτικότητος της εργασίας εις την παραγωγήν καπνών," *Οικονομικός Ταχυδρόμος*, 30 May 1957, 3.

the redundant produce at relatively less generous prices, or by giving non-price-related subsidies to farmers. Their main point was that these policies should under no circumstances replace, or even significantly disrupt, bilateral bargaining between producers and merchants.

THE AFTERMATH

Only one month after the establishment of EOK, the merchants attempted to draw the attention of the public to these problems. Tobacco producers in central Greece chose to cultivate tobacco on unsuitable land, which could give a good yield but at the expense of quality. Moreover, these farmers packaged their tobacco in suboptimal ways, i.e., not guaranteeing the long-term storability of the goods.⁷⁴ This story served as an example of the detrimental effects of the new policies.

In the short run, the new policy did not have a visibly detrimental effect on exports. In fact, Greece led the Oriental market in 1961 and 1962, as a mildew epidemic ravaged tobacco farms in Turkey and Bulgaria: In Greece, it only affected 8% of the yield.⁷⁵ The drastic decrease in the prices after the end of the epidemic, the illegitimate bargaining tactics that merchants used, and the turbulent political climate of the early 1960s led to important episodes of farmer protests in the summer of 1963 in central and northern

74. Vasilis, K. Thasitis, "Ελπίδες και κίνδυνοι για τα ελληνικά καπνά," *Οικονομικός Ταχυδρόμος*, 31 October 1957, 3, 10.

75. Centre of Programming and Economic Research, *Μελέται πενταετούς προγράμματος*, 89-90; Andreadis, *Σκέψεις γύρω από το σύγχρονο πρόβλημα*, 52.

Greece. In response to these protests, EOK introduced that year a policy of guaranteed prices as opposed to just entering the market in order to increase demand. In 1964 and 1965, the new centrist government, the first since a succession of right-wing governments since the early 1950s, offered slightly above market prices to force merchants into paying more to farmers.

In addition to a price policy more generous to farmers, the centrist government also adopted most of PASEGES' recommendations. It became virtually impossible for tobacco to remain unsold, whether for farmers or for the merchants. In the case of the northern regions of Macedonia and Thrace, farmers received an additional subsidy. These actions protected the producers from the steep decline in the price of Oriental in 1963 and 1964, when it lost 25% of its value. In the long run, however, Greece could not preserve its market share. Although worldwide production of cigarettes increased annually by 2%, Greek exports increased only by 0.8%. The income per producer and per hectare did increase modestly due to EOK's policies, but they had also benefited from the two years of global scarcity due to the mildew epidemic.⁷⁶ This was a circumstance that the government could not reproduce at will.

CONCLUSIONS

When we analyze how a region is integrated into the world economy, a number of questions are worth asking: Who

76. Centre of Programming and Economic Research, *Μελέται πενταετούς προγράμματος*, 86-91, Chart no. 21; Andreadis, *Σκέψεις γύρω από το σύγχρονο πρόβλημα*, 40, 113-114, 117-118, 149-150, 283-284.

creates value and how? Who captures such value? Or rather, how is it distributed among the members of the asset-owning class?⁷⁷ Contemporary economic mechanisms facilitate the extraction of value by lead firms from those who originally created it. This happens, however, without lead firms owning most of the economic assets participating in this network. Monopoly or monopsony are essential in order for these firms to control the production networks, capture value, and pass on costs and risks to smaller actors.⁷⁸ All major tobacco industries who bought Oriental from Turkey, Greece and Bulgaria had established such production networks already in the time under study. According to the GPN framework, the reason why smaller firms survive in these networks, despite capturing little value, is that lead firms choose not to be directly involved in activities with low profit margins. Without taking them over, lead firms pressure small firms to maximize value capturing.⁷⁹ As Quentin and Campling have put it,

Small firms can take many forms. An obvious source of labour-power to them are the millions who are not paid at levels sufficient for their social reproduction, thereby allowing for the survival of small companies below the average rate of profit. These include (self-exploiting) petty commodity producers in Africa and Asia... where men often exploit and fail to pay for the work of women and children in the household or extended family.⁸⁰

77. David Quentin and Liam Campling, "Global Inequality Chains: Integrating Mechanisms of Value Distribution into Analyses of Global Production," *Global Networks* 18, no. 1 (2018): 37.

78. Quentin and Campling "Global Inequality Chains," 34, 40-41.

79. Quentin and Campling, 43.

80. Quentin and Campling, 42.

The relationship between the male heads of the tobacco-producing households and their family members who offered their labor for minimum pay in the form of prices at the time of selling the crop corresponds really well to the role of petty commodity producers in the Global South. Furthermore, the role of tobacco merchants who bought the tobacco as cheaply as possible on behalf of the tobacco companies is another form of a small firm which survives because the lead firm does not want to directly engage in low-profit activities; on-farm purchasing, in this case.

The state itself also participates to different degrees in value capturing. In the words of Quentin and Campling,

[S]ocially useful work funded out of tax receipts is another category of 'unproductive' labour. What this suggests is that the trends driving the deepening of the smile curve could equally tend towards a growing public sector, with adequate provision of housing, education, healthcare and sanitation for increasing numbers of people if states could capture the surplus in the form of tax rather than capital.⁸¹

Thus, the state trying to capture some of the surplus in the form of tax, instead of it ending up as value captured by the tobacco lead firms or the local tobacco merchants, was an essential aspect of the tobacco production network. The state did return some of the value that was appropriated from the producers by supporting their income through EOK, and by giving them opportunities, through economic growth, to find better jobs in manufacturing or services. Moreover, the return of some of this value was essential in order for the postwar Greek state to deepen its legitimacy in the northern regions

81. Quentin and Campling, "Global Inequality Chains," 45.

that had supported the Communists during the Civil War, and had a high percentage of Muslim population.

Despite the funneling of value captured by the state into northern Greece, the region never upgraded from its status as a source of cheap commodities to that of a core region of the tobacco industry. As a commodity source region, it provided the raw material in order for cigarettes to become a constant feature of modern life.⁸² In theory, Greece could have increased its control over the production of Oriental had it cooperated closely with Turkey and Bulgaria. This position would have enabled them to form a special partnership with the tobacco lead firms by providing them with a high-quality ingredient necessary for their products. This partnership would have permitted economic actors, like producers, merchants, and the states, to capture a larger part of the produced value. However, these intentions were undermined by the interchangeability of Oriental in blended and filtered cigarettes. Additionally, the weakness of the postwar Greek state to define how its regions were integrated into the international production networks led to relationships that enabled only limited value to remain in the country.⁸³

Overall, this case study reveals that the power of the state to define how its regions are integrated into the world economy also decides how much of the produced wealth is captured from the ones who produce it. The establishment of organizations such as EOK can lessen the inequality between the economic entities participating in a production network, but it cannot transform the existing power dynamics.

82. Alan M. Brandt, *The Cigarette Century: The Rise, Fall, and Deadly Persistence of the Product that Defined America* (New York: Basic Books, 2007), 2.

83. Coe and Yeung, *Global Production Networks*, 186, 212-213.

Contributors

KALEB HERMAN ADNEY, Doctoral Candidate, Department of History, University of California, Los Angeles, USA

NIKOS ALEXIS, Doctoral Candidate, Department of History and Archaeology, University of Crete, Rethymno, Greece

JUAN CARMONA-ZABALA, Postdoctoral Researcher, Institute for Mediterranean Studies, Foundation for Research and Technology – Hellas, Rethymno, Greece

ATAR DAVID, Doctoral Candidate, Department of History, University of Texas at Austin, USA

SEMIH GÖKATALAY, Doctoral Candidate, Department of History, University of California, San Diego, USA

ERNST LANGTHALER, Professor, Department of Social and Economic History, Johannes Kepler University Linz, Austria

TRYFONAS LEMONTZOGLU, Teaching Fellow, Department of Social Anthropology, Panteion University of Social and Political Sciences, Athens, Greece

LUCIANO MAFFI, Professor, Department of Economics and Management, University of Parma, Italy

MAXIMILIAN MARTSCH, Doctoral Candidate, Department of Social and Economic History, Johannes Kepler University Linz, Austria

SIDDHARTH SRIDHAR, Doctoral Candidate, Department of History, University of Toronto, Canada

DIMITRIOS STERGIPOULOS, Doctoral Candidate, Department of History, University of California, San Diego, USA

DREW SWANSON, Jack N. and Addie D. Averitt Distinguished Professor, Department of History, Georgia Southern University, USA

GABRIEL TOBER, Doctoral Candidate, Department of Social and Economic History, Johannes Kepler University Linz, Austria

MANUEL VAQUERO PIÑEIRO, Associate Professor, Department of Political Science, University of Perugia, Italy

ISBN: 978-618-85195-5-8