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## Economic History and Austrian Theory

Nicola Tynan, Dickinson College, [tynann@dickinson.edu](mailto:tynann@dickinson.edu)

### Abstract

Economic history has become an increasingly broad discipline, after a temporary narrowing following the cliometric revolution of the mid-twentieth century. Increasingly sophisticated econometric techniques are used to capture the institutional detail involved in the dynamics of historical change. An emphasis on institutional detail and processes that unfold due to individuals' actions—as opposed to static, equilibrium outcomes—has long been a distinction between Austrian and neoclassical economics. Drawing on a range of topics in economic history, this article argues that, despite not being the dominant paradigm, Austrian economics can be useful for achieving a deeper understanding of questions that interest economic historians.

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**Key Words:** Austrian Economics, Economic History, Institutions, Methodology.

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## Introduction

Economic history is a broad field that has seen significant changes in its methodology and breadth over the past 60 years. The most notable change was the cliometrics revolution starting in the 1950s, heralded by Douglass North and Robert Fogel, that put a wedge between economic history done by economists and economic history done by historians, particularly in the United States (Claude Diebolt and Michael Hauptert 2018; Mark Koyama 2024; Robert Margo 2018).<sup>1</sup> While the cliometrics revolution is primarily characterized by the increasing use of econometrics within economic history, it can be seen more broadly as the “move from the historical, narrative approach of describing a historical event, toward the use of economic theory to analyze an event” (Hauptert 2019, 750). The cliometrics revolution not only increased the use of economic analysis to understand history but also ushered in a broadening of economic theory to include an emphasis on the importance of institutions for economic growth. This emphasis on institutions within economic history ultimately heralded a broader recognition of the importance of institutions within economic theory (Liya Palagashvili, Ennio Piano, and David Skarbek 2017).<sup>2</sup>

Characterizing economic history as the application of economic theory to historical questions suggests a place for the insights of Austrian economists given their earlier break with the German Historical School over the application of marginalist economic theory to the historical study of institutions (Karen Vaughn 1998, 31-32).<sup>3</sup> As Austrian economics emerged out of the marginalist revolution of the late nineteenth century, the theoretical approach taken by Carl Menger, Ludwig von Mises, and other early Austrians was viewed as part of a broader marginalist break from the old institutionalist and Marxist approaches. By the 1940s, however, the distinctions between general equilibrium theory, a more British partial equilibrium approach and the Austrian emphasis on process was becoming evident. As neoclassical economics placed greater emphasis on the mathematical conditions for equilibrium, Austrian economists continued to focus on the market as a process, individual values as subjective, and the importance of institutional detail.

Austrian economics views markets as processes of exchange between people whose purposely-chosen actions are based on their subjective individual preferences. The knowledge underlying preferences is dispersed across individuals and may not be something they can articulate independent of the act of choosing (Hayek 1945). Preferences cannot be treated as data external to the act of choice. Prices and profits are signals that provide information to individuals as they make choices, rather than equilibrium outcomes to which market participants must conform. Entrepreneurs use prices, profits, and specialist knowledge to help move resources to higher-valued uses discovered through the market process itself (Israel Kirzner 1973). Even though markets are understood as tending towards equilibrium, individual reassessments of opportunity cost and consumer valuation are continuously moving the potential equilibrium to which the market process is tending. The nature of knowledge and the dynamic process of discovery mean that market interventions assuming static equilibrium models, often justified by neoclassical theory of market failure, are likely to result in unintended consequences and potentially start a cycle of intervention (Kirzner 1985, 119-149).

Austrian concepts apply broadly to social phenomena, including the legal and social institutions within which markets operate. However, even within Austrian economics, there is

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<sup>1</sup> Douglass North and Robert Fogel were awarded the Nobel Prize in Economic Science in 1993.

<sup>2</sup> Although Margo (2018, 396) argues that the focus on institutions within economics arose independently of its rise within economic history.

<sup>3</sup> As Friedrich Hayek notes when discussing the different methods of social science and history, “the whole purpose of theory is to help our understanding of historical phenomena and that the most perfect knowledge of theory will be of very little use indeed without a most extensive knowledge of a historical character” (Hayek 1943, 9).

not full agreement over theory, methodology, or range of applicability. Some Austrian economists have been hostile to the early use of econometrics, seeing it as overly positivist, testing rather than applying theory, and limiting the questions economists could ask (Mario Rizzo 1978; Vaughn 1998, 113, 127). Others, influenced by Ludwig Lachmann or his student Don Lavoie, have embraced the need for empirical work, though not always econometric, while emphasizing the need for a richer set of sources than traditional macroeconomic data (Virgil Henry Storr 2019; Vaughn 1998, 128). Kirzner highlighted the challenge facing econometricians trying to describe not just “what might have occurred” but “what might have been spontaneously discovered” (Kirzner 1985, 146). While not fully able to address Kirzner’s concern, recent econometric techniques such as difference-in-difference models, come closer to capturing what unconstrained entrepreneurs might have discovered.

This article argues that, despite not being the dominant paradigm used by economic historians today, theories core to Austrian economics or a broader radical political economy remain useful and relevant for achieving a deeper understanding of questions that interest economic historians. Some arguments made by economic historians, often when contextualizing their empirical analysis, are compatible with an Austrian approach even if the authors would not characterize themselves as Austrian economists and might be surprised by such a connection. In other cases, research by scholars drawing on an Austrian understanding of subjective knowledge and market processes does not make this theoretical influence explicit. Other research by economic historians will be seen to fail when viewed through an Austrian lens.

The first section below draws on recent articles to provide an overview of the development and current state of the field of economic history. Subsequent sections use selected topics within economic history to explore the current and potential application of Austrian theories to questions of interest to economic historians. The topics range from big questions in economic history—the role of institutions in economic growth—to those that have received particular attention from Austrian economists—the evolution of money. Highlighted articles range from those written by some of the most well-known economic historians to those by less well known, generally younger, scholars. The topics discussed are neither exhaustive nor fully representative of economic history scholarship; their selection is informed by my own research interests and background studying Austrian Economics.

## **Contemporary Economic History**

Economic history has long focused on explaining economic growth, including international trade and industrialization, with a lot of attention paid to understanding the Industrial Revolution. While explaining economic growth remains a core research question, since the 1960s income distribution, including increases in the size of government, changes in fiscal redistribution, and the relationship between economic growth and distribution, have drawn greater interest, particularly as income inequality has increased in the United States and Europe since the 1980s. More recently, health and well-being amongst specific groups, such as infants and children or enslaved people in the US, have also received a lot of attention from economic historians. Measures of well-being have gone beyond national or individual income and wealth to include life-expectancy and reductions in mortality and morbidity. Pushing against the risk of insularity due to statistical technique, this breadth has made economic history more interdisciplinary.

The number of articles published in the eight most prestigious economic history journals has increased in the twenty-first century (Gregori Galofré Vilà 2020). At the same time, a growing number of economic history articles are being published in core economics journals and field journals in economic development, public health, and economic policy, some by economic historians and others by economists working in other fields incorporating economic

history into their analysis. New journals established in the 1970s, such as *Social Science History* and *Essays in Economic and Business History*, provided outlets for more interdisciplinary research in economic history.<sup>4</sup> Moving beyond a focus on the United States, a growing number of articles now focus on European economic history and, most recently, other non-US countries (Vilà 2020). Most economic history articles employ statistical analysis to answer outstanding questions and, although there is some evidence that research using more sophisticated econometric techniques is less likely to be published in economic history journals, this is not universally the case (Martina Cioni, Giovanni Federico, and Michelangelo Vasta 2020; Margo 2018).<sup>5</sup> As articles published by economic historians have become consistently empirical, book publication seems to have declined. Nevertheless, economic historians have continued to publish books that make their scholarship accessible to a broader audience more frequently than economists (Margo 2018, 380-381, 390).

Facilitating this growing scholarship in economic history, has been an explosion in the creation of new datasets (Diebolt and Hauptert 2018). Many of these are collaborative projects or the result of hard work by graduate students.<sup>6</sup> Economic historians have gained access to previously untapped archival sources and the creation of datasets has been made easier by new methods of accessing previously difficult-to-use data such as the use of OCR readers and software for spatial analysis. The creation of appropriate datasets to help answer a research question is itself informed by theory. Early cliometrics research relied on standard neoclassical theory, successfully establishing a distinct field of economic history, but open to criticism of a narrowness that missed important institutional detail (Koyama 2024). Before long, however, economic historians used a broader set of theories that included a role for institutions that was reflected in the inclusion of institutional variables in datasets. New datasets have allowed economic historians to revisit old questions and debates, such as that over the causes and details of the Industrial Revolution or the cause of the late-nineteenth-century mortality decline (Hauptert 2019). These datasets have also helped address new and more interdisciplinary questions.

The substantial increase in scholarship has served to generate consensus on some questions in economic history while leaving others contested. For example, the term Industrial Revolution initially implied a dramatic change in industrial technology around 1750 that ushered in a century of rapid economic growth, far higher than experienced previously. Pioneering work by Phyllis Deane and William A. Cole (1967) supported this sharp break in productivity and economic growth. Work by Nicholas Crafts and C. Knick Harley during the

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<sup>4</sup> Margo (2018) argues that the process of institutional change and the incentives facing new PhD economic historians have encouraged economists and historians to move into distinct silos, suggesting that one effect of the cliometrics revolution may have been to make history the one discipline where economic historians have failed to build interdisciplinary connections. He further suggests that the move into economic history by economists specializing in other fields might place economic history as a distinct field at risk, perhaps exacerbated by economic historians' tendency to publish in core economics journals rather than economic history journals. More evidence would be needed to support this latter concern because other institutional changes, such as the increase in co-authorship and growth in the number of journals, are acknowledged by Margo, but his calculations for economic history publication by type of journal do not take these into account.

<sup>5</sup> To give just one example from the *Journal of Economic History*, Brian Beach, Joseph Ferrie, Martin Saavedra, and Werner Troesken (2016) combine various new statistical techniques with sophisticated linking of individuals across censuses to show the long-run impacts of improvements in water quality on earnings. This article won the Economic History Association's Arthur H. Cole Prize for the best article in the journal in 2016.

<sup>6</sup> As an indication of the value placed on data sets, two data awards have been introduced by the Economic History Association since 2017: the bi-annual Gallman-Parker Prize awards lifetime contributions in creating, compiling, and sharing data, while the Engerman-Goldin Prize recognizes shorter-term contributions.

1980s provided evidence that there was not a radical break with the past, but rather a slower, longer process of productivity growth (Crafts 1983; Crafts and Harley 1992; Harley 1982).

Even as economic historians agree that economic development in Britain was a longer, cumulative process, however, there remains disagreement over the size of the impact on well-being, the importance of high wages, and whether Britain's economic growth was fundamentally the result of technology or also required institutional and cultural changes.<sup>7</sup> In a summary of recent research, Crafts (2021) argues that neither Allen (2009)'s explanation for labor-saving technological change driven by high wages nor Mokyr (2009)'s focus on an institutional environment that allowed skilled craftsmen to make entrepreneurial use of new ideas and innovations is fully convincing. Some of the ongoing debate revolves around conflicting calculations of the real wage; expanding the debate beyond wages to look at bargaining between workers and employers, and the evolution of labor markets more broadly, is needed to better understand economic growth and distribution before and during the Industrial Revolution (Stephenson 2018).

When summarizing the impact of the cliometrics revolution on our understanding of the Industrial Revolution, Hauptert characterizes institutions as "social inventions" which suggests a place for Austrian insights. Highlighting the neoclassical methodology dominant amongst economic historians, however, he then goes on to dismiss the role of the entrepreneur as a necessary feature of the Industrial Revolution on the grounds that it "does not fit well with standard neoclassical theory" (2019, 764-765).<sup>8</sup> On the contrary, I argue that the importance of institutions, institutional change and entrepreneurial discovery means that insights from Austrian economics can continue to improve our understanding of important questions in economic history (see other essays in this special issue for examples). The next section will look at how Austrian concepts of market processes and entrepreneurship inform how we interpret the development of new technologies and technological standards.

### **"History Matters": Viewing Markets as Dynamic Processes**

Austrian economists' understanding of the market as a process tending towards equilibrium, emphasizes the journey and not the destination (Kirzner 1985). As individual preferences change in response to information about goods and prices, the potential equilibrium will change. The process of individuals acting according to subjective preferences and personal incentives results in the development of institutions that were not the prior intention of any one individual. This creates a subtle, yet important, distinction that differentiates the Austrian application of marginal analysis from a general equilibrium or partial equilibrium approach, even those neoclassical approaches that include a dynamic game-theoretic process towards equilibrium.<sup>9</sup>

Paul David, former president of the Economic History Association, has been influential in encouraging the use of new theoretical approaches within economic history, particularly a

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<sup>7</sup> Robert Allen (2009) argues that it was primarily technological while Joel Mokyr (2009) emphasizes the role of ideas. Jan de Vries (2008) focuses on new consumer aspirations and industrious behavior as driving economic growth. Douglas Allen (2011) uses a principal-agent model to argue that pre-modern institutions, such as the restriction of public office to aristocrats, made sense in a world of great uncertainty and high measurement costs; the slow abandonment of these institutions meant that new technologies were slow to improve living standards, contributing to the Industrial Revolution as a process of cumulative change.

<sup>8</sup> Similarly, Diebolt and Hauptert exclude a process approach to economic history when they write that cliometrics "generally consists of constructing a model—of *general or partial equilibrium*—that represents the various components of the economic evolution in question and showing the way in which they interact" (2018, 430; italics added).

<sup>9</sup> As Lachmann emphasized, even the order that emerges from this process may not be beneficial, depending on the institutional rules (Storr 2019).

game-theoretic approach to understanding market processes, and generating an interest in history amongst mainstream economists.<sup>10</sup> Having long focused on the connection between technological change, innovation, and economic growth, his 1985 article, “Clio and the Economics of QWERTY”, set out to explain why “the study of economic history is a necessity in the making of economists” (David 1985, 332). He argued that the ongoing use of the QWERTY keyboard layout, despite the existence of the superior Dvorak keyboard, proved the existence of a little recognized source of market failure. In the face of network externalities and an industry with technical interrelatedness, economies of scale, and quasi-irreversibility of investment, the market process could result in lock-in to an inferior standard (David 1985).

David emphasized the importance of researching the history of products, technologies, and standards to understand the path-dependent processes that led to current market outcomes, while recognizing that other choices were possible. Finding the fork where potential future paths divided allows us to identify where the current equilibrium path was determined, and superior alternatives precluded. This emphasis on markets as dynamic processes challenges an earlier more static neoclassical view of a single equilibrium to which markets tend and allows for multiple equilibria, only one of which is reached. The emphasis on markets as a process may look the same as that taken by Austrian economists. It differs from an Austrian approach, however, by implicitly imposing an outside expert’s view of what would make for a superior outcome.

Stan Liebowitz and Stephen Margolis, whom Peter Lewin refers to as “unwitting Austrians”, challenge David’s argument by digging deeper into the history of the QWERTY keyboard, bringing a more subjective approach to assessing product quality, and emphasizing the role of the entrepreneur (Lewin 2001, 66; Liebowitz and Margolis 2001). They argue that ergonomic studies suggest the quality difference between the QWERTY and Dvorak keyboards is less than initially believed and, more importantly, people may value things other than relative typing speed at the moment of keyboard choice. David’s response to Liebowitz and Margolis focused primarily on their interpretation of his policy proposal. He argued that they misinterpreted his policy recommendation as calling for replacing the market process with decision-making by outside experts. He would just slow down the process:

to counteract the “excess momentum” of bandwagon movements in network product and service markets that can prematurely commit the future inextricably to a particular technical standard before enough information has been obtained about the likely technological or organizational and legal implications of an early precedent setting decision. (David 2007, 110)

In arguing that markets might tend too quickly to the wrong standard, David’s approach does not appreciate Hayek’s insight that information (or knowledge) about the technological, organizational, or legal implications may not exist in any one mind until the products or services have been adopted and used (Hayek 1945).<sup>11</sup> The Austrian approach would be to identify the institutional barriers that might prevent entrepreneurs moving the market to a higher-valued equilibrium if market participants view the current standard as an error. A deeper understanding of the institutional details and how they impact the market process is an important Austrian emphasis that can counter the neoclassical tendency to declare market outcomes inefficient if they deviate from an ideal competitive equilibrium standard.<sup>12</sup>

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<sup>10</sup> The publication of Cristiano Antonelli, Dominique Foray, Bronwyn Hall, and Edward Steinmueller (2006) reflects David’s influence on the profession.

<sup>11</sup> See Lewin (2001, 89).

<sup>12</sup> For a concise explanation of why Austrian economists reject the perfect competition benchmark, see Rosolino Candela (2020).

## Austrian Economic Theory and Robust Political Economy

One does not have to refer to oneself as an Austrian economist to use the most important insights from the Austrian tradition in one's approach to economic history.<sup>13</sup> Despite some efforts outside academia to keep Austrian economics hermetically sealed from other methodological approaches to economics, this is neither possible nor desirable and some core Austrian tenets are now employed more broadly (Vaughn 1998). Recognizing this, Peter Boettke, Peter Leeson and Robert Subrick (Boettke and Leeson 2004; Leeson and Subrick 2006) introduced the Robust Political Economy paradigm to refer to the insights of a broader group, including "Austrian-influenced economists such as James Buchanan, Kenneth Boulding, and Ronald Coase" (Palagashvili et al. 2017, 1). The Robust Political Economy paradigm has been embraced by others writing in the Austrian tradition (for example, Mark Pennington 2011).

Jack Wiseman, a student of Hayek's at the London School of Economics, should be added to the list of Robust Political Economists.<sup>14</sup> Dissatisfied with the disconnect between neoclassical equilibrium theory and the "realities of decision-making in the world we live in", Wiseman argued for the development of a radical subjectivist theory of economics, combining insights from Austrian and Public Choice theories (Hartley 2000, F451). Along with Kirzner (1973), Wiseman established a place for the entrepreneur to redirect resources towards higher-valued uses in a world with uncertainty. Wiseman made the case for economic theory to consistently view all costs, not just those associated with market decision-making, as subjective opportunity costs, leading him to conclude that an external observer cannot know the cost of an action ex-post (Wiseman 1953, 1989). An emphasis on these Austrian concepts—immeasurability of subjective value and the increasing size of government as a result of war—continue in the scholarship of economic historian Robert Higgs (1987).

One area where this has played out is in the use of macroeconomic indicators such as GDP, GNP, and TFP as the dominant measures of long-run economic growth by economic historians, not always recognizing their limitations. For long-run analyses where measures of GDP are correlated with other measures of well-being, the use of GDP may be justified. For short-run analyses, the apparent objectivity of GDP as a measure of the value of economic output or, even more boldly, social welfare is problematic. One place where this misapplication of macroeconomic data from an Austrian perspective has gained broad recognition is the debate amongst economic historians over what finally moved the United States out of the Great Depression. Higgs (1992) challenged the once-dominant view that World War Two ended the Great Depression (see, for example, J.R. Vernon 1994). That explanation relied on measures of real output that include military spending in national output and calculations using prices that were not all free to adjust to market conditions (Higgs 1992). Higgs found instead that the accumulated household savings, pent-up demand, and a change in expectations explain the return to prosperity after the war.

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<sup>13</sup> Note Lewin's characterization of Liebowitz and Margolis as unwitting Austrians (Lewin 2001).

<sup>14</sup> Wiseman was the founding Director of the Institute of Social and Economic Research (ISER) at the University of York and the co-author with Alan Peacock of *The Growth of Public Expenditure in the United Kingdom* (1961; see Keith Hartley 2000). This publication started out as a compilation of British data for the NBER, an organization that Hauptert says "ultimately served as a catalyst for the change in emphasis from narrative to quantitative studies in economic history" (2019, 753). Peacock and Wiseman's emphasis on the expansion of public finance to social spending and not just taxation directed attention to the broader topic of fiscal redistribution. Peter Lindert, a scholar whose research focuses on fiscal redistribution, is amongst the most influential of economic historians (Vilà 2020). Without suggesting that Lindert uses Austrian methodology, his work highlights the longstanding connection between topics of interest to economic historians and Austrian economists.

## **Institutions Matter**

The Robust Political Economy paradigm emphasizes the long-standing commonalities between Austrian and New Institutional Economics (Palagashvili et al. 2017). For Austrian economists, the interest in the detailed process of change comes from their emphasis on individual actions that bring about the creation of new institutions or institutional change. New Institutional economists focus more on the institutions such as rules and norms, and other constraints such as firms, within which individual action takes place. Nevertheless, they share an interest in the evolution and impact of both market and non-market institutions (Menger 2009a; Storr 2019; Vaughn 1998).

### ***Money as an Organic Social Institution***

In his work on institutions, Menger highlighted the difference between those designed intentionally and those that arise organically. “Organic social institutions have their origins in the opinions, intentions, and actions of individuals, but their specific characteristics were not designed by any human mind” (Palagashvili et al. 2017, 4; summarizing Menger 2009a, 146). Menger’s most well-known example of an organic institution is that of money. Menger argued that money originated with the individual incentive to use a valuable, divisible, easily transportable good to lower the costs of exchange. Individual rationality and incentive compatibility are sufficient for such a good to become accepted as a medium of exchange (Menger 2009b).

Menger did not believe that there was any historical evidence for the more common view, now known as Chartalism (or Cartalism), that money was established by law or convention: “no historical monument gives us trustworthy tidings of any transactions either conferring distinct recognition on media of exchange already in use, or referring to their adoption by peoples of comparatively recent culture, much less testifying to an initiation of the earliest ages of economic civilization in the use of money” (Menger 2009b, 17). Evidence for either side of the argument is difficult to obtain and relies on interdisciplinary research and insights from anthropology. Nevertheless, the debate over the origins of money has not gone away and underlies some modern policy debates, such as the validity of Modern Monetary Theory.<sup>15</sup>

Using evidence from ancient Greece and Lydia, Alla Semenova argues against Menger’s organic theory of the evolution of money. The role of cattle in religious offerings explain the state-religious use of the ox-unit of value. As other animals were sacrificed and debt payments made to priests in other commodities, the ox-unit was used to compare their value and determine the amount owed (Semenova 2011).<sup>16</sup> Early use of money by the state and religious authorities does not undermine Menger’s theory of the evolution of money as a medium of exchange, however. It gives reasons why the state chose a particular good, such as oxen, as a unit of value, but cannot explain the choice of certain metals for coins that had an equivalent value. Recent research shows it is not easy for a government to impose a unit

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<sup>15</sup> Charles Goodhart, previously Chief Advisor of the Bank of England and Norman Sosnow Professor of Banking and Finance at the London School of Economics, has argued for the Chartalist view of the origin of money over that of Menger (Goodhart 1998). Lawrence H. White (2017) argues that the historical evidence does not support the Chartalist account. Chartalists struggle to explain why governments would have chosen such precious, and therefore more expensive, metals as gold and silver for coins over cheaper metals such as iron or copper. As White (2017) explains, preciousness is advantageous for a market-evolved currency but a disadvantage for one imposed by a fiscal agency.

<sup>16</sup> In Semenova’s account, money originated as a unit of value and account rather than as a medium of exchange (2011). Menger’s theory is often presented as Metallist, relying on a commodity with intrinsic value (Semenova 2011, 395; Semenova 2014). Menger, however, refers only to “so-called intrinsic grounds” that still have their origin in individuals’ subjective evaluation (Menger 2009b, 46).



of value or medium of exchange and provides support for money's value being dependent on its use as a medium of exchange (Karlo Kauko 2018). The Finnish government's attempt to impose the Russian rouble in 1808 failed to replace Swedish money despite the rouble becoming the primary form of money used by the government and for the payment of taxes. Kauko notes that, "Swedish money remained the predominant payment medium in daily transactions for decades" (2018, 78). People continued to use Swedish money in exchange transactions because they trusted it would retain its value.

### ***The Importance of Institutional Detail***

Over time, economic historians have recognized the need for more depth and detailed analysis of institutions. In earlier work, institutions were often presented in broad terms without full details being given. For example, the highly cited work of Daron Acemoglu, Simon Johnson and James Robinson (2001) finds that institutions explain a large part of the comparative economic performance today of countries that were once colonized by European powers. They find that colonizer strategy in choosing inclusive rather than extractive institutions, partly determined by a less harsh disease environment in the colony, resulted in institutions conducive to economic growth. In a subsequent article, they find that secure property rights, greater equality of land ownership, and a more extensive franchise provide a superior explanation of the more rapid rate of economic growth in north America compared to south America and the Caribbean (Acemoglu et al. 2002).

One limitation of this country-level analysis is the broad use of the concept of institutions.<sup>17</sup> Douglass North was a pioneer in focusing economic historians' attention on the broader political and institutional environment surrounding markets, but his early work took a very broad view of institutions. A recent paper by Daniel Seligson and Anne McCants (2019) challenges North's combined treatment of informal and formal rules under the umbrella term "institutions". Seligson and McCants distinguish between institutions, such as laws, that "promote growth in the economy and vary on the same time scale as economic performance itself" and norms which they refer to as "the slowly changing codes of conduct, traditions, convention, and taboos" and others may refer to as culture. They show that Acemoglu et al.'s (2001) model fails to address this endogeneity satisfactorily by not accounting for the time horizon of institutions of different types.

To use another classic example, North and Barry Weingast (1989) argued that the increased security of property rights in Britain following the Glorious Revolution was due to constitutional arrangements that allowed for more credible government commitment. More recently, critics have argued that, as with the Industrial Revolution, Britain's Glorious Revolution was not so revolutionary. Gary Cox uses more detailed institutional analysis to show there is some truth to critics' argument that institutional change was less extensive than initially argued by North and Weingast. Nevertheless, a narrower focus on shifting power from the Crown to Parliament does support the existence of a discrete break with the past (Cox 2012). Most importantly, Cox emphasizes that it was not making individual property rights more secure, but Parliament's power to control property rights adjustments that made a difference after 1688. Parliament was intentional in bringing about the changes but could not have seen the full impact of the reforms on future economic growth. While the constitution was designed, the full property rights implications were not understood in 1688.

Thorough research explicitly informed by appreciation of the market as a process and providing a deep understanding of the institutional and cultural details of local markets is one way Austrian economics can improve our understanding of history. Tyler Cowen's 1996 article,

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<sup>17</sup> Acemoglu et al. caution that in their research institutions "are treated largely as a 'black box'" (2001, 1395).

“Why Women Succeed, and Fail, in the Arts”, is an early example of such research. He argues that using a steady-state approach and relying on data for artworks produced by women and men has led some scholars to posit a genetic difference in artistic talent. A deeper understanding of the cultural and institutional constraints and the incentives facing female artists, however, shows that women did succeed in those times and places, such as Bologna during the Renaissance, and art forms, such as photography, naïve art, and textiles, that presented fewer barriers to entry or greater potential returns for women artists (Cowen 1996). As barriers have fallen over time, the proportion of artists who are women has increased.

This emphasis on institutional detail and theory-informed institutional change is also evident in Boettke’s understanding of the economic calculation debate of the 1920s and economists’ understanding of Lenin’s attempt to impose a planned economy after World War One (Palashvili et al. 2017, 7-14). Boettke’s analysis of the Soviet economy during the decade 1918-28 challenged the then-prevailing view that war communism was simply an ex-post justification of policies introduced as pragmatic responses to emergencies (Boettke 1990, 12). More recent work by Andrei Markevich and Mark Harrison reinforces this view (Harrison and Markevich 2018; Markevich and Harrison 2011). They conclude “the claim that war communism was an accidental assortment of pragmatic responses to circumstances is no longer tenable” (Harrison and Markevich 2018, 21).

Coming from the other direction, Amanda Gregg’s research on late Imperial Russia provides an example of work by an economic historian whose focus on entrepreneurial decision-making and institutional change comes close to using an Austrian approach. Gregg (2020) highlights the role of institutional change in increasing economic growth and the near-doubling of Russian GNP between 1890 and 1914. She shows that the choice of corporate form influenced a firm’s access to capital. Those firms that chose to take advantage of new laws allowing incorporation enjoyed enhanced labor productivity. Because firms that incorporated were already more productive, they were able to incur the cost of obtaining an Imperial concession that gave them access to capital to purchase additional machines.<sup>18</sup> Viewed through an Austrian lens, entrepreneurial firms viewed their current profits as a signal they were successfully moving resources to higher-valued uses. This gave them confidence to treat the opportunity costs of incorporation as low relative to the potential gains from expanding their machine capacity. Hinting at the organic evolution rather than intentional design of institutions, Gregg writes, “institutions are endogenous to economic conditions” (Gregg 2020, 402).

Robust Political Economy has combined Austrian economists’ focus on the importance of property rights with an emphasis on understanding the ways seemingly subtle differences in property rights institutions either facilitate or limit markets. As noted above, a growing emphasis on institutional detail by economic historians has contributed to our understanding of why countries have experienced different rates of productivity growth. Evidence is quite strong that agricultural productivity was lower in France than Britain during the eighteenth century but economic historians did not have a good explanation for the difference: the smaller plot size of French farms fails as an explanation and the inappropriateness of French soil and climate limiting adoption of new technologies provided only a partial explanation. By focusing on differences in property rights for agricultural land, Philip Hoffman showed that fragmented land holdings and the requirement of unanimous communal consent for individual enclosure made it prohibitively costly for farmers to plant artificial meadows (Hoffman 1988). In line with Hayek’s emphasis on the importance of rules of the game for the operation of spontaneous orders, Hoffman shows that the rules of the game mattered for agricultural productivity in eighteenth-century Europe. Similarly, differences in the rules of the game, or regulatory

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<sup>18</sup> Gregg was a student of Troesken and the indirect influence of North’s emphasis on institutions is evident in the article.

regimes, limited integration of the American South into the national financial system (Barry Eichengreen 2019, 38).

Another controversial topic where institutional detail has proven important is explaining the gender wage gap. Claudia Goldin's recent work highlights a new institutional explanation for the remaining gender wage gap in the United States. She shows that flexibility in work hours is important for moving women's workplace compensation close to gender-wage parity (Goldin 2014). Building on her early work on the economic history of gender, work and wages, Goldin does not deny some role for labor market discrimination but finds that it does not explain as much of the remaining wage gap as many economists have argued. This importance of local labor market norms and institutions for gender-based differences in outcomes fits with Cowen's historical analysis of gender differences in the arts (Cowen 1996).

While I am not suggesting that Hoffman, Eichengreen, Goldin or Gregg would consider themselves Austrian economists, they emphasize institutional change in ways that would be compatible with Austrian theory. In all these cases, analysis of the institutional details is important for understanding the outcomes of market and broader social processes. Just as economic historians have recognized the need for more detailed institutional analysis and contextualizing how institutions are interpreted by actors, Austrian economics does the same, so offers the potential for greater application of Austrian theory to questions of interest to economic historians (Storr 2019).

## Health and Welfare

One outcome of the cliometric revolution was an expansion of the measures used by economic historians to capture changes in well-being, largely driven by Fogel's focus on anthropometrics. Economic historians now use life-expectancy, mortality, and morbidity as increasingly common measures of well-being to supplement more traditional macroeconomic measures such as changes in GDP. Underlying all measures of well-being are individual choices made in the face of social institutions. The measures themselves capture only some aspects of well-being resulting from these choices. Neither neoclassical nor Austrian economics provides a way to weight observed measures—such as mortality rate and GDP—to fully reflect the outcome of individual preferences and choice, as debates surrounding COVID-19 policies highlighted.

We might ask to what extent Austrian economics would accept life-expectancy as a measure of well-being resulting from individual choice. Hayek's discussion of contagious diseases might suggest a rejection of such measures. He argued that the study of contagious diseases was one of the true "natural sciences of society" that could be understood as things in the world, making them different from phenomena studied by the social sciences (Hayek 1943, 1). However, recent research suggests that the spread of contagious diseases is partly a result of our beliefs about how the diseases spread, choices made based on those beliefs, and how both the disease and our choices are influenced by institutions and norms. Even if diseases themselves can be understood as natural phenomena, the impact on human well-being requires us also to understand how people interact with the diseases.

Evidence that the spread of disease is determined not only by natural characteristics of the disease itself, but also individual choices and institutions is provided by Troesken's *Pox of Liberty* (2015). Troesken compares the successful eradication of yellow fever in the United States (chapter six) with the failure to address smallpox (chapter four). A commitment to individual liberty within the United States limited the Federal government's ability to control the spread of yellow fever domestically: it could not prevent states from trading with places that had outbreaks of the disease. Nevertheless, states and port cities had incentives to introduce limited quarantines that balanced the economic burden of restricting trade, risking its relocation to other ports, with slowing the spread of the disease. And, while unable to restrict

trade, the Federal government was able to act internationally and use military intervention to reduce the incidence of yellow fever abroad. In comparison, the federal system of government and the requirement that public health authorities obtain legislative approval for mandatory vaccination gave those opposed to vaccination excessive influence and slowed the eradication of smallpox in the United States.

One question that economic historians have revisited is the cause of the mortality transition—from high to low mortality rates—and increase in life expectancy in the United States and Europe during the late nineteenth and early twentieth centuries. While historians agree that improvements in water and sanitation, better nutrition, and improvements in medical care all played a role, the relative importance of each remains contested. In the last couple of decades, economic historians have argued that investment in water and sanitation were crucial for reducing mortality. Initially, research focused on showing that discrete public health interventions, often by municipal governments, reduced mortality (David Cutler and Grant Miller 2005; Ferrie and Troesken 2008). More recently, debates have arisen over the relative importance of and complementarities between different sanitary improvements. Marcella Alsan and Goldin (2019) argue that it was the simultaneous implementation of water and sanitation projects that reduced infant mortality in Massachusetts between 1880 and 1915. Daniel Gallardo-Albarrán (2020) finds a similar complementarity between water and sewer investments in reducing infant mortality in Germany with a particularly strong impact on areas with a large textile industry and a weak impact in areas with high rates of inequality. Most empirical studies by economic historians emphasize the health impacts of discrete changes in rules or technologies. While this can make identification easier and be useful and informative in some instances, it creates challenges when multiple public health improvements are implemented in close succession, as was often the case.

Mark Anderson, Kerwin Kofi Charles and Daniel Rees (2018) challenge the role of public health improvements in the decline of infant and overall mortality in cities in the United States using a study that included not only commonly used measures of improved water quality but also introduction of sewage treatment and regulations relating to bacteria in milk. Anderson et al. (2018) specifically question the earlier results of Cutler and Miller (2005) and have intensified the debate over the significance of sanitary investments in improving life expectancy. They find that filtering water did reduce infant mortality but not as much as Cutler and Miller argued. They also found that public health improvements were not sufficient to explain the larger decline in infant and overall mortality rates in the late-nineteenth and early-twentieth century United States.

One reason that Anderson et al. (2018) reach different conclusions to Cutler and Miller (2005) is because they use different approaches to identify the timing of public health interventions. In practice, few interventions are as discrete as either study suggests. The effectiveness of any intervention depends upon complementary technologies, for example whether individuals are connected to the water or sewer network when the intervention occurs. While all authors try to control for other discrete interventions occurring at the same time, they pay little attention to how the intervention changes individual decisions regarding complementary technologies. Looking at the longer-term process of individual choice can help assess whether one criterion for the timing of an intervention better approximates the impact than another.

For some technologies and rules, an understanding of the complex process of diffusion might undermine the plausibility of an empirical assumption of discrete change. Recent research by Troesken, Nicola Tynan and Yuanxiaoyue Artemis Yang (2021) shows that the transition from intermittent to constant water supply in London reduced waterborne disease mortality and contributed to the late-nineteenth century mortality transition. They show that this transition took 25 years. A discrete assumption of change in 1871, when the law required a move to constant service, would not have found an effect. While using empirical data and

econometrics, the authors draw on Austrian economic theory to understand the historical process when emphasizing institutional detail and individual choice in the face of incentives and local cost differences.<sup>19</sup>

As noted above for smallpox, in some cases the mix of institutional detail, scientific fact and individual beliefs resulted in outcomes from market and political processes that most economic historians would consider bad. For example, erroneous beliefs about the transmission of disease in the mid-1800s, encouraged government officials to require households to flush waste from cesspools and house drains into public sewers that deposited this waste in the local water source (Tynan 2013, 77). Similar decisions, such as the Sanitary District of Chicago's diversion of sewage from Lake Michigan to the Chicago River, hurt towns downstream, in this case St. Louis (Troesken 2015, 53). On the other hand, fear of disease externalities encouraged greater local government investment in waterworks in the American South, and a greater reduction in African American mortality, than might have been expected in an era of racial divide (Troesken 2004).

One finding that economic historians have reached general agreement over is that water filtration reduced typhoid mortality (Anderson et al. 2018, 2019; Beach et al. 2016; Ferrie and Troesken 2008). Less well incorporated into the economic history literature is the longer-run market process that led to the development of large-scale filtration systems during the first half of the nineteenth century. These systems removed bacteria in ways early developers did not appreciate. They could not have intended the specific health outcomes of water filtration because the typhoid bacillus had not been identified (Moses Nelson Baker 1949). Nevertheless, both private water companies and local governments adopted an uncertain technology as they grappled to improve water quality for customers and local communities.

Work by Rick Geddes and Troesken (2003) shows that the institutional details mattered. The willingness of private companies to invest in filtration depended partly on municipal governments' ability to credibly commit not to expropriate water company's assets. Where municipal governments could not make such a credible commitment, companies under-invested and were subsequently municipalized. These findings make sense from an Austrian perspective emphasizing individual choice under uncertainty. Entrepreneurs made a rational decision not to invest in marginally remunerative investments for which they may not hold a franchise long enough to recover their initial outlays.<sup>20</sup> As more detailed data become available to address questions in economic history, Austrian economics has an important role to play in making sure that these data help us understand not just what the world looked like at a moment in time, but the important processes based on individual choice that led to those outcomes and how those outcomes impacted future decisions.

## Conclusion

The emphasis of Austrian economics on markets as processes operating within a broader set of political and social institutions fits comfortably with many of the developments in economic history. As economic historians have placed a greater emphasis on processes of change and institutional detail, Austrian economic theory has incorporated insights from Public Choice, New Institutional Economics, and closely-related schools of thought.<sup>21</sup> This has closed the gap between neoclassical and Austrian approaches to economic history. Nevertheless, Austrian economic theory places greater emphasis on the market as a process, more strongly grounded in subjective individual preferences. Differences of perspective remain over the

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<sup>19</sup> Lionel Kesztenbaum and Jean-Laurent Rosenthal (2017) make a similar argument for the importance of following the diffusion of a technology, focusing on the importance of sewers for reducing mortality in Paris from 1880-1914.

<sup>20</sup> See also Troesken (2015), chapter 5.

<sup>21</sup> For a full list of related schools of thought, see Palagashvili et al. (2017, 17-18).

interpretation of equilibria within market processes and the merits of macroeconomic measures of well-being.

Increasingly sophisticated econometric techniques are being used by economic historians to address the long run impact of short-term and cumulative changes. These, combined with more granular data sets covering many more variables, are allowing economic historians to include institutional details and longer processes of change within their analysis. An Austrian methodology has the potential to help identify missed institutional detail, important entrepreneurial decisions, and aspects of the market process that a more neoclassical approach may fail to identify. Economic historians may then look for ways to find ways to capture these details in the data.

The argument here is similar to Koyama's (2024, 15) that Austrian economists should allow for a "richer relationship between economic theory and empirical evidence", but we view this relationship slightly differently. Koyama encourages Austrian economists to expand into empirical research within economic history to help determine which models are appropriate; my emphasis is on benefits that Austrian economic theory can bring to helping determine which empirical results are more appropriate. While a purely Austrian approach may not fit easily with econometric tests that treat costs as objective or assume away a role for entrepreneurship, an Austrian appreciation of market processes and institutional detail may help determine whether econometric results are likely to over- or understate the findings of particular problems in economic history.

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