

# Institutions & Well-Being

**Toke Aidt**

Faculty of Economics, University of Cambridge

**Boris Nikolaev**

Hankamer School of Business, Baylor University

**Daniel L. Bennett**

Hankamer School of Business, Baylor University

September 28, 2016

## **Abstract**

It is by now well-established in the development economics literature that institutions play a vital role in shaping social, economic, and political incentives, reducing transaction costs and uncertainty, and promoting long-run economic growth. Following recent developments on the measurement of socio-economic progress, which emphasize the importance of many non-economic dimensions of quality of life, the goal of this special issue is to encourage new socio-economic research on the relationship between institutions and well-being in this broader sense. Here, we provide a brief overview of the existing literature on institutions and well-being and then summarize the papers in this special issue according to three unifying themes (1) economic freedom studies; (2) institutions and long-run growth, and (3) well-being and institutions in transition economies. We conclude by discussing some challenges for future research.

*“The tools that the new economic historian inherited from the economist were not intended to deal with long-run economic change...The economist not only accepted tastes, technology, and population as given, but also he accepted equally the current basic ground rules within which both market and non-market decisions were made. For that matter, the theory did not recognize the possibility of making economic decisions via the political process. Information was assumed to be perfect and costless.”*

Douglas North (1971)

## **1. Introduction**

The goal of this special issue, which we dedicate to the late Nobel Laureate Douglas North, one of the most prolific and influential economists of the twentieth century, is to encourage new socio-economic research on the relationship between institutions and well-being. North passed away on November 15, 2015, days after his 95<sup>th</sup> birthday, but his legacy in the field of economics will long be remembered. He popularized an innovative way of thinking about the big questions in economics—e.g., what makes some countries rich and others poor—by emphasizing the essential role of institutions in shaping economic and political incentives and human interactions. For him, the ultimate explanation for many economic and social phenomena is found precisely in the type of factors that many economists before him took for granted. In the spirit of Douglas North, this special issue is dedicated to the study of institutions, or as he defined them “the humanly devised constraints that structure political, economic and social interactions.” We believe that having a special issue on the topic of “Institutions & Well-being” is timely and relevant for at least three reasons.

First, institutions matter. While it is by now clear that achieving economic growth and prosperity depends on the complex interaction of many factors—policy, culture, geography, legal origins—perhaps even a fair amount of luck, development economists increasingly refer to institutions as one of the most important and “deep” determinants for sustained economic

prosperity (Acemoglu et al., 2005; Economides and Egger, 2009). Some economists even suggest that institutions are now at the forefront of mainstream economic theory (Jones and Romer, 2009). Institutions, as North (1990, p. 111) suggests “shape the subjective mental constructs that individuals use to interpret the world around them and make choices. Moreover, by structuring the interaction of human beings in certain ways, formal institutions affect the price we pay for our actions.” In that sense, institutions play a vital role in reducing transaction costs and shaping the appropriate incentives that drive long-run economic growth and development. The ideologies that people have can also influence how they interact with each other and ultimately determine their subjective experiences and satisfaction with various aspects of their lives.

Second, most of the previous research in the field has focused on establishing the relevance of institutions to economic outcomes such as growth in GDP per capita and individual income. Well-being, however, is a multidimensional concept that requires looking not merely at the health of the economic system, but also at a variety of other human experiences and conditions such as civic engagement, community values, health, education, social networks, safety, freedom, or psychological well-being and its many sub-domains; including life satisfaction, positive and negative emotions, meaning, self-esteem, optimism, or positive engagement. Many of these well-being dimensions are strongly correlated with economic development. But there are also striking discrepancies, especially when it comes to how people perceive their lives are going (Stiglitz et al., 2009). Oil-rich countries in the Middle East, for instance, have some of the highest levels of GDP per capita in the world, yet they lack some basic human freedoms and significantly lag behind with regard to human rights, education, and other important well-being dimensions. While good institutions are an end in themselves, studying the relationship between different types of institutions and these well-

being dimensions can significantly enrich our understanding of the consequences of institutions and help instruct public policy.

This is particularly important today because in recent years the measurement of socio-economic progress has started undergoing a fundamental change. Starting with the seminal work of the Commission on the Measurement of Economic and Social Progress in 2009 (Stiglitz et al., 2009), a variety of initiatives around the world have been launched that aim to provide a more complete picture of socio-economic progress. The OECD, for example, is now tracking individual well-being in eleven distinct quality of life categories using both objective and subjective indicators—from material standards of living and work-life balance to subjective indicators of health and life satisfaction. Gallup is now collecting data on human thriving and happiness in more than 140 countries. A World Happiness Report that tracks not only the level of happiness, but also its distribution, has been published annually since 2012. The New Economic Foundation (NEF) is collecting data on national well-being for 22 European countries on multiple aspects of subjective well-being such as life evaluation, emotions, vitality, autonomy, meaning, trust, supportive relationships, resilience, self-esteem, optimism, and positive functioning. An increasing number of countries, including leading economies such as the UK, now have distinct national well-being accounts.<sup>1</sup> The World Bank now reports, as part of the World Development Indicators, estimates of genuine investment which captures the evaluation of intertemporal social welfare (Dasgupta, 2009; Fleurbaey, 2009). This shift is now quickly gaining momentum.<sup>2</sup>

---

<sup>1</sup> The Office of National Statistics (ONS) published 41 measures of National well-being, organized by ten “domains” including health, what we do, and where we live. The measures include both objective variables such as the unemployment rate and subjective ones such as the percentage of people who felt safe walking alone at dark.

<sup>2</sup> There are a large number of other recent initiatives that attempt to go beyond GDP to track human progress, including the Legatum Prosperity Index, the Social Progress Index, the Happy Planet Index, the Sustainable Economic Development Assessment, and the Economist’s “Where to Be Born” Index, among others.

Finally, improving well-being is not only an important social-economic objective and something that most people strive for, it is also an individual and collective resource that can lead to many objective benefits and drive social progress. Healthier, wealthier, happier and more educated people can transform the social fabric of society, which can lead to higher levels of political participation, and in the long-run increase the likelihood of the development and persistence of good institutions (Lipset, 1959). More educated nations, for instance, are more likely to have higher levels of tolerance and trust, lower transaction costs and crime, and be more politically engaged (Lochner, 2011). Subjective well-being has also been linked to many objective benefits—from health and pro-social behavior to higher income and productivity (De Neve et al., 2013). In other words, pursuing well-being is both intrinsically and extrinsically valuable. We believe that a better understanding of the relationship between institutions and well-being can offer many unique insights into some of the vexing barriers to achieving sustained well-being and of the consequent conditions most conducive to improving quality of life.

The articles in this special issue contribute to our understanding of institutions and well-being along at least one of three margins described above. Section 2 provides a brief review of the literature on institutions and well-being, followed in Section 3 by a synopsis of the papers in this issue and how they contribute to this literature. Concluding remarks are offered in Section 4.

## **2. A brief literature review**

Since the early days of economics as a distinct discipline, often associated with the release of Adam Smith's *The Wealth of Nations*, economists have sought to understand the fundamental causes of social progress and human prosperity. Classical economists such as Smith, John

Stuart Mill, and David Ricardo stressed the importance of institutions, public policy, and the rule of law in shaping economic performance and human well-being. As economics became increasingly formalized throughout the twentieth century, and particularly with the development of neo-classical growth models, the explanation for differences in economic development and material well-being across the world began to focus on the accumulation of physical and human capital (Solow, 1956; Koopmans, 1965; Lucas, 1988). As Easterly and Levine (2001) recognized, however, factor accumulation is unable to explain the majority of the variation in income and growth differences in cross-country growth regressions. Easterly and Levine noted that the residual, often referred to as total factor productivity (TFP), has the most explanatory power, and called for economists to focus on the determinants of TFP as a means to better understand economic growth.

Most neoclassical growth models treat the production process as a “black box” in which quantities of labor, capital, and technology are somehow combined to produce goods and services, ascribing differences in these variables as the causes of economic prosperity. But why and how societies choose to invest in new technology or human capital is often left unexplained. Along these lines, North and Thomas (1973, p. 2) suggest that factors such as innovation, economies of scale, education, and capital accumulation “are not causes of growth; they are growth.” Acemoglu (2009, p. 109) adds: “...any explanation [of growth] that simply relies on technology, physical capital, and human capital differences across countries is, at some level, incomplete. There must be other, deeper reasons that we will refer to as “fundamental causes” of economic growth. It is these reasons that are preventing many countries from investing enough in technology, physical capital, and human capital.” In other words, variables such as technology and human and physical capital are only *proximate* causes of economic growth and prosperity, but are insufficient as fundamental explanatory causes.

The experience of the transition economies at the end of the last decade furthermore suggests that factors of production are incapable of delivering growth without the appropriate institutional environment (Eicher and Garcia-Penalosa, 2006). The work of Nikolova (this issue), for example, shows that even the glaring happiness gap between transitioning and advanced economies is now closing, largely due to improvements in institutions such as the rule of law.

Increasingly, economists are interested in understanding the fundamental, long-run causes of economic growth and development. Spolaore and Wacziarg (2013, p. 325) provide a review of the burgeoning literature examining the so-called “deep roots” of economic development, which include a host of factors that “have been transmitted across generations over the very long run” such as culture, genetic diversity, geography, and institutions. In his 1993 Nobel Prize lecture, North (1994, p. 359) stated that “Institutions form the incentive structure of a society and the political and economic institutions, in consequence, are the underlying determinant of economic performance.”

Institutions, as North (1991) defines them, “consist of both informal constraints (sanctions, taboos, customs, traditions, codes of conduct), and formal rules (constitutions, laws, property rights).” According to North (1990), formal rules are created by the state while informal rules are part of the heritage we call “culture.” The role of institutions throughout history, as North (1990) explains, has been to create order and reduce uncertainty. This is how institutions are directly related to economic outcomes by reducing transaction costs, risk, and hence the total cost of production. Bjørnskov (this issue), using post-Cold War data on 212 economic crises in 175 countries, shows that institutions consistent with the principles of economic freedom are associated with a lower risk of economic crises, as measured by smaller peak-to-through ratios and shorter recovery time.

Even more importantly, institutions determine the “rules of the game” and shape the relative rewards from different social, economic, and political activities such as innovation, investment in education, or rent seeking. In this sense, institutions can be seen as “deep” determinants of the allocation of entrepreneurial talent to different productive, unproductive and even destructive social activities that lead to a variety of well-being outcomes (Baumol, 1990).

North’s theory about institutions and economic performance has exerted a lasting impact on the social sciences, undoubtedly influential at spurring interest in the measurement of economic, legal and political institutions as a means to empirically test his hypothesis. Indeed, a stream of empirical papers (e.g., De Long and Shleifer 1993; Knack and Keefer 1995; Mauro 1995; Hall and Jones 1999; de Haan and Sturm 2000; Acemoglu et al. 2001; Dawson 2003; Easterly and Levine 2003; Rodrik et al. 2004; Doucouliagos and Ulubasoglu 2006) have tested North’s hypothesis using a variety of institutional measures, reaching a “close to intellectual consensus that the political institutions of limited government cause economic growth” (Glaeser et al. 2004, p. 272).

Formal economic institutions such as competitive markets, the banking system, or the structure of property rights are especially important for economic progress because they fundamentally influence how society invests in human capital, physical capital, and technology, as well as how production is organized. Using genetic diversity as a plausible source of exogenous variation, Faria et al. (this issue) provide strong evidence for a potentially causal link between institutions, measured by the Economic Freedom of the World index, and long-run economic growth. The results in their study also highlight the importance of human capital, approximated by cognitive skills, as an important determinant of economic institutions. Their analysis suggests a more dynamic view of development in which institutions



lead to economic development, but higher levels of physical and human capital can improve the quality of economic and political institutions, creating a virtuous cycle.

Institutional economists have thus tried to identify the consequences of “imperfect institutions” (Eggertsson, 2005, p.1), essentially expanding neoclassical growth models to include institutions as the underlying mechanism that drives development. The relationship between corruption and genuine wealth creation, for instance, is strong and negative: simply put, the most corrupt countries are also the poorest ones (Aidt, 2009, 2011). While some economists believe that institutional economics does not fundamentally challenge the tools of neoclassical growth models (Brousseau and Glanchant, 2008; Joskow, 2008), many others consider institutions as the main determinant of economic growth (Economides and Egger, 2009; Acemoglu et al., 2005).

Recent studies have also emphasized the importance of cultural institutions (for a review see Alesina and Giuliano, 2015). There is strong evidence, for instance, that the value dimension individualism-collectivism is one of the strongest cultural determinants of economic growth and prosperity (Gorodnichenko and Roland, 2011). Individualistic cultures that place value on personal freedom, self-reliance, creative expression, affective autonomy, and reward individuals for their accomplishments with higher social status tend to experience faster rates of innovation and economic growth compared to more collectivist societies. Using subjective well-being data from eleven Central and Eastern European countries, Ferrer-i-Carbonell and Gërkhani (this issue), furthermore, find that evading taxes is negatively associated with individuals’ life satisfaction. This relationship is largely shaped by people’s perception of formal and informal tax-related institutions and social capital.

Despite the growing body of theoretical and empirical research that shows that institutions are strongly correlated with better economic outcomes, it is by now also clear that

institutions are endogenous. As Rodrik (2004, p.1) notes: “rich countries are [also] those where investors feel secure about their property rights, the rule of law prevails, private incentives are aligned with social objectives, monetary and fiscal policies are grounded in solid macroeconomic institutions, idiosyncratic risks are appropriately mediated through social insurance, and citizens have recourse to civil liberties and political representation” to demand better political institutions and influence the formation of economic institutions. Acemoglu et al. (2005), for example, build a dynamic model in which economic institutions determine economic performance, but economic institutions are determined by the distribution of political power, which then determines political institutions and the distribution of resources. Much of this literature assumes that institutions are the consequences of choices made by domestic actors constrained by domestic factors. In reality, many international factors also play a role: international trade, international factor mobility, foreign investment, development aid, or open or covert foreign intervention by foreign powers (e.g., Antràs, and Padró i Miquel, 2011; Aidt and Albornoz, 2011). Dutta and Williamson (this issue) provide some support for the hypothesis that foreign aid can help poor countries improve their economic institutions, but only when good political institutions are already present. Nejad and Young (this issue), using evidence from bilateral migration flows, furthermore show that economic institutions, particularly property rights and the rule of law, are a significant pull factor for potential migrants.

In which direction the causality between institutions and economics outcomes goes and what are the exact mechanisms through which institutions work is still highly debated in the economic development literature. Glaser et al. (2004), for instance, suggest that most measures of formal institutions are simply inadequate for the task to establish the “deep” determinants of economic growth, although their view is challenged by Acemoglu et al. (2015).

It is accepted, however, that institutions are causal to economic prosperity in the sense that if a poor country improves the quality of its institutions in the direction of stronger protection of property rights, it is likely to experience higher levels of economic prosperity (Rodrik, 2004). Developing a new measure of democratic institutions, the Support Vector Machine Democracy index, Gründler and Krieger (this issue) contributes to this literature. They report a robust positive relationship between the new democracy index and economic growth, and suggest that democracy exerts influence on growth through better education, higher investment shares, and lower fertility rates, but not necessarily higher levels of redistribution.

More recent studies have started examining the relationship between formal and cultural institutions, and variety of other objective and subjective social outcomes such as trust, tolerance, crime, poverty, or subjective well-being. Berggren and Nilsson (this issue), for example, find suggestive evidence that the institutions of economic freedom increase tolerance, measured by the willingness to let atheists, homosexuals and communists speak, keep books in libraries and be a college level teacher. They suggest that this relationship may work through reducing feelings of tension and conflict. In this sense, institutions may play a vital role in creating a non-discriminatory and inclusive environment that fulfills the basic psychological need for relatedness.

An important insight from this literature, for instance, is that institutions may have a positive impact on psychological well-being beyond their direct impact on variety of socio-economic outcomes: a concept known as *procedural utility* (Frey et al., 2004). The idea here is that people care not merely about outcomes, but also about the processes that lead to these outcomes. In this respect, institutions may provide an independent source of utility by influencing how individuals perceive their own sense of self. Individuals, for instance, may experience a higher level of subjective well-being if they believe that they are treated in a way

they consider just or fair regardless of the material outcomes (Frey and Stutzer, 2002). For instance, the right to participate in the political process, measured by the extent of direct democratic rights across regions, is strongly correlated with subjective well-being (Frey and Stutzer, 2002). Nikolaev and Bennett (this issue) show that people who live in countries with institutions consistent with the principles of economic freedom experience a greater perception of freedom of choice and control over their life. They furthermore find suggestive evidence that a potential mechanism that explains this relationship is the perception of procedural fairness and social mobility.

An emerging literature on the relationship between formal institutions and subjective well-being also finds a positive correlation between the institutions of economic freedom and subjective well-being, most often proxied by survey measures of life satisfaction (for a review of this literature see Spruk and Keseljevic, 2015). Cheng et al. (this issue) build a theoretical model and find that even housing property rights matter for subjective well-being. Specifically, using subjective well-being data from China, the authors find that home ownership is associated with higher levels of life satisfaction, although this happiness premium is larger for people who have full ownership compared to those who have only a minor ownership stake in their home.

### **3. The contributions to the special issue**

The special issue contains ten contributions to the literature on institutions and well-being. We discuss them in the following subsections: Economic freedom studies; Institutions and long-run growth; and Well-being and institutions in transition economies.

#### **3.1. Economic freedom**

Many of the papers in this issue focus on a particular aspect of the institutional environment, which economists and public political scholars call economic freedom. The cornerstones of economic freedom include voluntary exchange, personal choice, freedom to enter and compete in markets, and the protection of private property rights (Gwartney et al., 2015). The institutions and policies, or “rules of the game,” that are most commonly associated with economic freedom are related to limited government, sound monetary policy, respect for the rule of law, private property rights, and open markets.

The most commonly used measure of economic freedom in the empirical literature is the Economic Freedom of the World (EFW) index produced by the Fraser Institute,<sup>3</sup> although several other economic freedom indices exist such as the Heritage Institutions Index of Economic Freedom and the Fraser Institute’s Economic Freedom of North America index. As discussed below, papers in this issue use all three of these indices in novel ways. Economic freedom is a broad measure of (formal) institutions that incorporates or is closely related to other measures of institutional quality that are commonly used in empirical studies. Examples of such related measures include protection against expropriation (Acemoglu et al., 2001), legal origins (La Porta et al., 2008), constraints on the executive (Marshall and Jagers, 2002), a variety of indices designed to measure the “quality of governance such as control of corruption and bureaucratic efficiency (e.g., see World Bank Governance Indicators), and variety of indices on democracy.<sup>4</sup>

Scholars have consistently found economic freedom to be empirically associated with a number of positive social, economic, and political outcomes. For instance, Hall and Lawson

---

<sup>3</sup> The EFW index is a summary measure that combines forty-two specific indicators into five broad areas of economic freedom: (1) size of the government, (2) legal structure and protection of property rights, (3) access to sound money, (4) freedom to trade internationally, and (5) regulation of credit, labor, and business.

<sup>4</sup> Many of these measures have been used as a proxy for property rights institutions. Bennett et al. (2016) assess several of these measures and their relative ability to predict economic development.

(2014) survey the body of literature utilizing the EFW data and conclude that out of 402 scholarly articles that used it as an independent variable, more than two-thirds found economic freedom to correspond to a “good” outcome such as faster growth, better living standards, lower unemployment, and higher levels of subjective well-being. Meanwhile, less than four percent of these articles found that economic freedom is associated with a “bad” outcome such as increase in income inequality.<sup>5</sup>

Six out of the ten papers in this special issue, contribute to the line of research that examines how economic freedom influences socio-economic and political outcomes. Bjørnskov’s paper (this issue), “Economic freedom and economic crises,” for example, explores the association between capitalistic institutions and economic crises. While there is a growing body of evidence that institutions are an important factor for economic growth and development, the relationship between institutions and economic crises have been far less studied empirically. Economic crises, however, are an important aspect of economic performance and can exert a substantial and widespread negative impact on multiple dimensions of individual well-being. Many policymakers and citizens attribute economic crises to bad macroeconomic policy, but Acemoglu et al. (2003) demonstrate that after controlling for the impact of political institutions, macroeconomic policies exert only a minor effect on economic volatility and crises. Using the Heritage Foundation’s Index of Economic Freedom (IEF) as a measure of institutions, Bjørnskov estimates its impact on several measures of economic crises for a sample of 175 nations that contains 212 crises and spans the period 1992-2010. His findings suggest that economic freedom is robustly correlated with smaller

---

<sup>5</sup> Bennett and Nikolaev (2016a) document that previous results pertaining to the relationship between economic freedom and inequality are quite sensitive to a number of factors such as the sample, time period and/or measure of inequality used. Hall, Stansel, and Tarabar (2015) provide a review of the literature using U.S. state-level economic freedom data.

peak-to-trough ratios and shorter crisis recovery times. Bjørnskov furthermore determines that these effects are primarily driven by the economic regulation components of the IEF index.

A lingering question in the development literature is how good institutions are acquired and sustained in the first place.<sup>6</sup> This puzzle has profound implications for the well-being of people in the poorest nations of the world. Research suggests that foreign aid from international development agencies to developing countries has been ineffective in delivering economic growth (e.g., Easterly 2003; Rajan and Subramanian 2008). The so-called Washington Consensus emerged as a set of economic reforms trumpeted by policy circles in Washington, DC in the late 1980s, based on conditioning foreign aid on the adoption of market-oriented institutional and policy changes. As discussed by Dutta and Williamson (this issue), research on the effectiveness of conditional foreign aid are largely ambiguous. The authors contribute to this line of research in their paper “Aiding economic freedom: Exploring the role of political institutions” by exploring the effect of foreign aid on economic freedom, conditional on political institutions for a sample of 108 countries over the period 1971-2010. Their results suggest that foreign aid given to democracies may lead to more economic freedom, but it may have the opposite effect when offered to autocracies; however, Dutta and Williamson show that their results are sensitive to a variety of factors such as model selection, the choice of controls, the time period sampled, and the measurement of aid, leaving room for additional research on this important international political economy topic.

---

<sup>6</sup> Factors related to geography (Engerman and Sokoloff 1997; Bennett and Nikolaev 2016b), ideology (Piketty 1999), settler mortality (Acemoglu et al. 2001), ethnolinguistic fractionalization (Easterly and Levine 1997), legal origins (La Porta et al. 2008), genetic diversity (Faria et al., current issue) and the historical prevalence of infectious diseases (Nikolaev and Salahodjaev, 2017), among others, have all been suggested as possible candidates for the deep origins of institutions themselves.

It is by now well-established in behavioral psychology that people who *believe* that they have more control over their lives are more likely to successfully cope with adversity, pursue achievement related behavior, engage in morally relevant actions, and, ultimately, report higher levels of subjective well-being (e.g., Lefcourt, 2014; Verme, 2009). In their paper, “Give me liberty and give me control: Economic freedom and control perceptions,” Nikolaev and Bennett (this issue) examine how the institutional environment in a country, measured by the EFW index, is related to people’s perception of freedom of choice and control over their lives. Using data from the World Values Survey and the EFW index, the authors show that people who live in countries with a high degree of economic freedom are more likely, on average, to report higher levels of control perceptions. One possible channel that explains this relationship is the perception of procedural fairness and social mobility. Institutions consistent with the principles of economic freedom place value on autonomy and reward individual accomplishment with social status. In this way, they provide the necessary incentives for individuals to maximize their talents through their free choices in a socially productive way. Since economic freedom is associated with many positive economic outcomes such as higher levels of innovation, personal income, and economic growth, this can lead to a virtuous cycle that can provide positive feedback to individuals that their efforts matter, which can encourage them to invest even more resources in developing their talents and seeking success through hard work.

Tolerance is considered by many to be a defining characteristic of modern Western culture and an important ingredient for successful democracy. It is also associated with many positive socio-economic outcomes such as higher levels of human capital (Florida et al., 2008) and subjective well-being (Inglehart et al., 2008). In their paper, “Tolerance in the United States: How freer markets transform racial, religious, political and sexual attitudes,” Berggren



and Nilsson (this issue) examine the effect of economic freedom on tolerance at the US state level using data from the General Social Survey and the Economic Freedom of North America index (Stansel and McMahon, 2013). Their results suggest that higher levels of economic freedom relate positively to more tolerance towards three minority groups: atheists, communists and homosexuals (but not to the same extent when it comes to racists). The more market-oriented a state's economic policy is (e.g., less progressivity in taxes), the authors conclude, the more willing people are to let minorities into the public discourse. One possible explanation for this findings comes from the Public Choice literature: by taxing some people's income at high rates, state governments introduce tension and conflict (Buchanan and Congleton, 2006), which can lead to lower tolerance towards minorities. In this sense, institutions may play a vital role in creating a less discriminatory and more inclusive social environment that fulfills one of the most basic psychological needs of humans, that of relatedness. Berggren and Nilsson's results are robust to numerous sensitivity tests as well as an instrumental-variable (IV) analysis in which the authors use the average change in economic freedom in neighboring states as an instrument.

Given that institutional change is often slow and uncertain, individuals living in nations with poor institutions may not be willing to wait for quality of life enhancing structural change to occur. Instead, they may be willing to migrate in search of better opportunities in countries with better institutions. In their paper, "Want Freedom Will Travel," Nejad and Young (this issue) study bilateral patterns of international migration according to institutional quality, as measured by the EFW index. Outflows of human capital can lead to lower productivity in the origin country and lower levels of entrepreneurship and innovation as it becomes more difficult for new technologies to be adopted (Marchiori et al., 2013). The so-called "brain drain" has been a significant problem for developing and transitional economies where human

capital is already scarce. Using 3,566 observations on bilateral migration flows from 77 countries, including both OECD and non-OECD countries, for the 1990-2000 period, the authors find that economic freedom is a significant pull factor for potential migrants. Their findings are based on Poisson pseudo-maximum likelihood (PPML) estimation, which allows them to use zero values that contain meaningful information about migration patterns. Once they decompose these findings by different sub-areas of economic freedom, Nejad and Young find that improvements in the legal system and property rights are the strongest pull factor for potential migrants. The effect is equally strong for both college and non-college educated people. These findings suggest that differences in institutional quality, and specifically economic freedom, may contribute significantly to “brain drain” compared to more conventional explanatory factors such as income differentials.

### **3.2. Institutions and long-run growth**

The seminal paper by Acemoglu et al. (2001) on the colonial origins of institutions triggered an enormous research effort into the deep determinants of institutions and, in turn, well-being. Acemoglu and co-authors argued that early European settlers shaped the institutions they created in the colonies to suit the physical environment in the new settlements and that these early choices had a long-run effect on economic prosperity. Subsequent research has attempted to “unbundle” institutions, e.g., making a distinction between property rights and legal institutions (Acemoglu et al., 2005), or pointed to other causal mechanisms than institutions, such human capital (Glaeser et al., 2004; Hanushek and Woessmann, 2012a, 2012b). In their paper, “Unbundling the roles of human capital and institutions in economic development,” Faria et al. (this issue) make an important contribution to the research agenda on comparative economic development. Their attempt to unbundle the role of human capital

and institutions embodies three key innovations: (i) they capture institutional quality with the multi-dimensional Economic Freedom of the World index rather than, as in previous research, with single dimension indicators; (ii) they measure human capital with cognitive skills rather than with education attainment; and (iii) they use genetic diversity to induce exogenous variation in institutions rather than settler's mortality. Faria et al. find a robust positive, and possibly causal, effect of economic freedom on long-run growth and, in a horse race between institutions and cognitive skills, they find that economic institutions are the primary determinants of long-run growth. Human capital, they argue, plays a secondary, but crucial role through its effect on the quality of institutions.

One of the most striking facts in comparative political economy is the positive correlation between national income and democracy. Since the first statistical evidence was unearthed in the 1950s by Seymour M. Lipset in his influential paper "Social Requisites of Democracy: Economic Development and Political Legitimacy" (Lipset, 1959), a lively debate amongst political scientists, sociologists, and economists regarding the correct interpretation of this correlation has raged. Lipset (1959, p. 86) himself interprets the correlation as a unidirectional causal relationship from economic development to democracy. This interpretation is controversial and the direction of causality is not clear: is democracy causing growth or is growth causing democracy.<sup>7</sup> One of the contentions in this debate relates to the fundamental question of how to measure "democracy" over time and space. Democracy is clearly multi-faceted with different dimensions, which, at times, exert opposing effects on economic and social outcomes (Aidt and Eterovic, 2011). Dahl (1971) made an important

---

<sup>7</sup> Many researchers are highly skeptical of the idea that economic development and growth is a cause of democracy, including Moore (1966), Przeworski and Limongi (1997), and Acemoglu et al. (2008), while others such as Gundlach and Paldam (2009) and Boix (2011) present evidence consistent with Lipset's original interpretation. The evidence of growth effects of democratization is stronger and Acemoglu et al. (2014) conclude that "democracy does cause growth".

distinction between three dimensions of democracy: political competition, electoral participation, and civil liberties. Empirical operationalization's capture these to varying degrees. For example, the widely used Polity IV data (Marshall and Jaggers, 2014) do not capture suffrage extensions directly, while the democracy indicator proposed by Przeworski et al. (2000) and Cheibub et al. (2010) does not capture civil liberties. The coding issue becomes particularly thorny when it comes to defining transitions from one political regime to another because the timing of such "transitions" are highly dependent on what the underlying democracy indicator measures. Papaioannou and Siourounis (2008) and Acemoglu et al. (2014) argue that the solution to this is to combine a variety of different indicators.

Gründler and Krieger (this issue) are critical of this approach in their paper, "Democracy and growth: evidence from SVM DI indices," and propose a different and more sophisticated way to make use of the many available democracy indices. Their idea is to use machine learning algorithms for pattern recognition (Support Vector Machines) to aggregate the underlying secondary data. The great advantage of this is that the algorithm learns by evaluating each country-year pair along multiple dimensions and then aggregates the information in an optimal way to produce a single continuous democracy index, called the Support Vector Machines Democracy Indicator (SVM DI). It covers 185 countries between 1981 and 2011 and is available for other researchers to use from the Supporting Material. As always, the proof of the pudding is in the eating. It is, therefore, important that Gründler and Krieger demonstrate that their much more fine-grained indicator of democracy can capture variation that other indicators miss. Using state of the art panel techniques, they find a robust positive (within country) relationship between the SVM DI and GDP growth, and they show that the effect runs through more education, higher investment, and lower fertility.

### 3.3. Well-being and institutions in transition economies

The fall of communism in Central and Eastern Europe and the former Soviet Union in the early 1990s brought with it a rapid change in economic and political institutions such as switching from planned to market economies, restoring private property rights, liberalizing prices and foreign exchange and building new (democratic) political institutions. An important lesson from this transitioning experience is that while Western style political institutions can rapidly be introduced in society, achieving well-functioning institutional environment that supports modern democracy requires much more. In fact, in the short-run, such rapid transition can lead to many negative outcomes including high levels of income inequality, deteriorating interpersonal trust, increases in corruption, and, overall, lower levels of social capital. In this respect, one of the most robust findings in the well-being literature is the large (un)happiness gap that has been documented between people in post-communist and advanced societies, which, more than two decades after the transition, still persists (Guriev and Zhuravskaya, 2009).

In her paper, “Minding the happiness gap: Political institutions and perceived quality of life in transition,” Nikolova (this issue) examines the role of political institutions such as the rule of law in explaining the life satisfaction gap between transition (post-communist) and non-transition (advanced) economies. In particular, merging individual level data from the World Values Survey with macro-economic data from the World Bank Development Indicators and institutional data from the PRS International Country Risk Guide from 1994 to 2013, she documents four empirical observations. First, there is a large *unconditional* happiness gap between transition and advanced economies that has decreased over time. Second, even after controlling for a large set of socio-economic variables, this gap persisted until the early 2000s, but has slowly closed in the past two decades. Third, using variance

decomposition analysis, Nikolova finds that differences in macroeconomic variables such as GDP per capita, inflation, and unemployment can largely explain the happiness gap between transition and non-transition economies in the 1990s and the early 2000s. The rule of law, on the other hand, played an important role in explaining the happiness gap in the 1990s and completely eliminates the happiness gap in waves 4 and 5 of the WVS (in the 2000s). In fact, holding both macro-economic factors and the rule of law constant, transition countries appear to be 0.6 points happier than non-transition ones in the latest wave of the WVS in 2013. The message of Nikolova's paper is an optimistic one: as institutional and market reform continues in many transition countries, the psychological well-being of citizens in these post-communist societies will slowly converge to the well-being levels of their counterparts in advanced Western economies.

Fiscal capacity building was one of the many problems encountered during the economic and political transition from socialism to market capitalism in Central and Eastern Europe (Roland, 2002). An important element of this process is to get citizens to pay tax and to avoid or minimize tax evasion. In an ideal Wicksellian world, taxation is voluntary because the payment of each taxpayer is perfectly matched by the value of the public goods received. In practice, however, tax is coercive because this match is never perfect; yet, most citizens agree to pay their taxes because they perceive some link to the public services provided. Ferrer-i-Carbonell and Gërzhini (this issue) break new ground in the study of tax evasion in transition economies. They argue and find supporting evidence in survey data from 14 Central and Eastern European countries in 2013 and 2014 that tax evaders may be *less* satisfied with their life than others. This mapping from tax evasion to life satisfaction, however, depends critically on how individuals perceive the institutions that govern tax collection and public spending. For individuals who report that they are dissatisfied with the public services provided, the sign

of the mapping switches: if they tax evade, their life satisfaction improves. Social capital also matters. Ferrer-i-Carbonell and Gërzhini make an important distinction between membership of socially productive Putnamesque and rent-seeking Olsonian organizations. They report that tax evaders associated with the former have lower life satisfaction while tax evaders associated with the later have greater satisfaction.

Although political institutions have not changed much in China during its transition towards a market economic system, a housing reform in the early 1990s gradually abandoned the old egalitarian-oriented housing system and established a housing market. With a lack of alternative investment options, the housing market has become an important way in which Chinese people invest their savings. Rapidly rising housing prices and increasing housing inequality have furthermore reshaped the Chinese urban landscape, with potentially large impacts on the subjective well-being of the urban population. The empirical literature on the relationship between home ownership and subjective well-being has thus far produced mixed results. In their paper, “Housing property rights and subjective well-being in urban China,” Cheng et al. (this issue) build a theoretical model that links the gradient of housing property rights to subjective well-being. Using cross-sectional data from the China Household Finance Survey (CHFS) for over 5000 urban residents in 2011 from all provinces in mainland China (except Xinjiang, Tibet, and Inner Mongolia), the authors empirically test the predictions of their model with respect to a range of ownership options, including full, partial, and minor ownership, as well as the source of the home loan. Their findings suggest that home ownership is associated with higher levels of life satisfaction. However, the extent to which people experience higher levels of subjective well-being depends on the type of property rights and the type of loan associated with owning a home. People with full ownership, for instance, experience higher levels of life satisfaction compared to people with only partial ownership,

who, in turn, are happier than people with minor ownership. The results hold even after controlling for a rich set of confounding variables such as household wealth, migration status, and employment relations. The findings are also robust to instrumental variable estimations and matching estimators in which Cheng et al. estimate the average treatment effect of home ownership on life satisfaction. Furthermore, the authors provide external validity by using the Chinese Health and Nutrition Survey and the China Family Panel Studies, which allows them to run fixed-effects models and control for time-invariant individual traits that could potentially bias the results. Overall, their findings suggest that when it comes to housing, which is usually the largest investment that most Chinese families make during their lifetime, property rights matter not only in the economic, but also in the psychological sense.

#### **4. Conclusion**

For a long time, neo-classical economists have built models, conducted research, and prescribed policies based on theories that ignore one of the most fundamental aspects of economic life: institutions, or the formal and informal rules in society that “structure incentives in exchange, whether political, social, or economic” (North, 1992, p.5). According to North (1992), all economies have transaction costs—the multitude of costs associated with doing business every day. For North (1992), how successful a country is in achieving economic growth and prosperity in the long-run depends to a great extent on how successful it is in creating the type of political and economic institutions that minimize these transaction costs. As Acemoglu and Johnson (2005, p.950) note: “There is a growing consensus among economists and political scientists that the broad outlines of North’s story are correct: The social, economic, legal, and political organization of a society, i.e., its ‘institutions,’ is a primary determinant of economic performance.”



Despite many theoretical and empirical advances that have allowed economists to study economic and political institutions in a more systematic way, there are still many important questions that remain to be answered and continue to be intensely debated in the literature. North (1991, 1992) himself pointed out many of these questions: What are the deep origins of formal institutions and what is their interplay with culture; how to best measure and model institutional dynamics; what is the direction of causality; and what are the underlying mechanisms through which institutions work.

The failure of the introduction of Western style political institutions in Russia and Eastern Europe to ignite economic growth after the transition process began in the early 1990s, for instance, points out that such institutions alone are not a sufficient condition for economic growth. Prosperity requires open markets, but also respect for the rule of law, generalized level of trust, and a variety of other formal and informal institutions to align well with each other. Spelling out precisely how to move from bad to good institutions remains an unresolved puzzle in the literature.

The astounding levels of economic development in China over the past two decades despite little political reform, and the success of countries such as Singapore where the state is still heavily involved in economic life<sup>8</sup> (Coffman et al., 2013), have furthermore raised important questions about the mix of economic and political institutions that is optimal for long run prosperity. The success of economies such as Vietnam that rank poorly on indices that measure formal institutions, also begs the question whether and when informal institutions can serve as substitutes for formal institutions. As Rodrik (2004) suggests, for

---

<sup>8</sup> Almost all of the land in Singapore is owned by the government, 85 percent of housing is supplied by the Housing Development Board, and 22 percent of national output is produced by state-owned enterprises (Ha-Joon Chang, 2014).

many developing countries “second-best” institutions remain the best option during the transitional process.

Finally, a majority of the papers so far examine the average effect across countries and citizens. Yet, some of the most interesting questions are usually at the margin. Do institutions of capitalism, for instance, favor only certain groups in society more than others? Is the relationship between formal institutions, culture, and well-being heterogeneous with respect to the level of economic development? What are underlying mechanisms that can explain this relationship? Many of these questions will, we hope, shape the research agenda in the field in the coming decades.

## References

- Acemoglu, D. (2009). Introduction to modern economic growth. Princeton University Press.
- Acemoglu, D., Johnson, S., et al. (2005a). Unbundling institutions. *Journal of Political Economy*, 113(5):949–995.
- Acemoglu, D., Johnson, S., Robinson, J., and Thaicharoen, Y. (2003). Institutional causes, macroeconomic symptoms: volatility, crises and growth. *Journal of Monetary Economics*, 50(1):49–123.
- Acemoglu, D., Johnson, S., and Robinson, J. A. (2005b). Institutions as a fundamental cause of long-run growth. *Handbook of Economic Growth*, 1:385–472.
- Acemoglu, D., Johnson, S., Robinson, J. A., and Yared, P. (2008). Income and democracy. *The American Economic Review*, 98(3):808–842.
- Acemoglu, D., Naidu, S., Restrepo, P., and Robinson, J. A. (2014). Democracy does cause growth. Report: National Bureau of Economic Research.
- Aidt, T. S. (2009). Corruption, institutions, and economic development. *Oxford Review of Economic Policy*, 25(2):271–291.
- Aidt, T.S. 2011. Corruption and sustainable development. In S. Rose-Ackerman and T. Soreide (eds.). International Handbook on the Economics of Corruption, Volume Two, Edward Elgar, pp. 3-51.
- Aidt, T.S., Eterovic, D.S., 2011, Political competition, electoral participation and public finance in 20th century Latin America. *European Journal of Political Economy* 27(1): 181-200.

- Aidt, T. S., & Albornoz, F. (2011). Political regimes and foreign intervention. *Journal of Development Economics*, 94(2): 192-201.
- Alesina, A. and Giuliano, P. (2015). Culture and institutions. *Journal of Economic Literature*, 53(4):898–944.
- Antràs, P., Padró i Miquel, G. (2011). Foreign influence and welfare. *Journal of International Economics* 84 (2): 135-148.
- Baumol, W. J. (1996). Entrepreneurship: Productive, unproductive, and destructive. *Journal of Business Venturing*, 11(1):3–22.
- Bennett, D. L., Faria, H. J., Gwartney, J., and Morales, D. R. (2016). Evaluating alternative measures of institutional protection of private property and their relative ability to predict economic development. *Journal of Private Enterprise*, 31(Summer 2016):57–78.
- Bennett, D. L. and Nikolaev, B. (2016). On the ambiguous economic freedom-inequality relationship. *Empirical Economics*. doi:10.1007/s00181-016-1131-3
- Bennett, D. L. and Nikolaev, B. (2016). Factor endowments, the rule of law and structural inequality. *Journal of Institutional Economics*, pages 1–23.
- Boix, C. (2011). Democracy, development, and the international system. *American Political Science Review*, 105(04):809–828.
- Brousseau, E. and Glachant, J.-M. (Eds) (2008). *New institutional economics: a guidebook*. Cambridge University Press. Cambridge.
- Buchanan, J. M. and Congleton, R. D. (2006). *Politics by principle, not interest: Towards nondiscriminatory democracy*. Cambridge University Press. Cambridge.
- Chang, H.-J. (2014). *Economics: the user's guide*. Bloomsbury Publishing USA.
- Cheibub, J.A., Gandhi, J., Vreeland, J.R., 2010. Democracy and dictatorship revisited. *Public Choice*. 143, 67–101.
- Dahl, R.A., 1971. *Polyarchy: Participation and Opposition*. Yale University Press, New Haven CT.
- Dawson, J. W. (2003). Causality in the freedom–growth relationship. *European Journal of Political Economy*, 19(3):479–495.
- De Haan, J. and Sturm, J.-E. (2000). On the relationship between economic freedom and economic growth. *European Journal of Political Economy*, 16(2):215–241.
- De Long, J. B. and Shleifer, A. (1993). Princes and merchants: European city growth before the industrial revolution. *Journal of Law and Economics*, 36(3):2.

- De Neve, J.-E., Diener, E., Tay, L., and Xuereb, C. (2013). The objective benefits of subjective well-being. World Happiness Report.
- Doucouliaqos, C. and Ulubasoglu, M. A. (2006). Economic freedom and economic growth: Does specification make a difference? *European Journal of Political Economy*, 22(1):60– 81.
- Easterly, W. (2003). Can foreign aid buy growth? *The Journal of Economic Perspectives*, 17(3):23–48.
- Easterly, W. and Levine, R. (1997). Africa’s growth tragedy: policies and ethnic divisions. *The Quarterly Journal of Economics*, pages 1203–1250.
- Easterly, W. and Levine, R. (2001). What have we learned from a decade of empirical research on growth? It’s not factor accumulation: Stylized facts and growth models. *The World Bank Economic Review*, 15(2):177–219.
- Easterly, W. and Levine, R. (2003). Tropics, germs, and crops: how endowments influence economic development. *Journal of Monetary Economics*, 50(1):3–39.
- Economides, G. and Egger, P. H. (2009). The role of institutions in economic outcomes: editorial introduction. *European Journal of Political Economy*, 25(3):277–279.
- Eggertsson, T. (2005). Imperfect institutions. opportunities and limits of reform. Michigan: University of Michigan.
- Eicher, T. S. and Garcia-Penalosa, C. (2006). Institutions, development, and economic growth. MIT Press.
- Engerman, S. L. and Sokoloff, K. L. (1997). Factor endowments, institutions, and differential paths of growth among new world economies. How Latin America Fell Behind, pages 260– 304.
- Fleurbaey, M. (2009). Beyond GDP: The quest for a measure of social welfare. *Journal of Economic Literature*, 47(4):1029–1075.
- Florida, R., Mellander, C., and Stolarick, K. (2008). Inside the black box of regional development? Human capital, the creative class and tolerance. *Journal of Economic Geography*, 8(5):615–649.
- Frey, B. S., Benz, M., and Stutzer, A. (2004). Introducing procedural utility: Not only what, but also how matters. *Journal of Institutional and Theoretical Economics*, 160(3):377–401.
- Frey, B. S. and Stutzer, A. (2002). What can economists learn from happiness research? *Journal of Economic Literature*, 40(2):402–435.
- Glaeser, E. L., La Porta, R., Lopez-de Silanes, F., and Shleifer, A. (2004). Do institutions cause growth? *Journal of Economic Growth*, 9(3):271–303.

- Gorodnichenko, Y. and Roland, G. (2011). Which dimensions of culture matter for long-run growth? *The American Economic Review*, 101(3):492–498.
- Gundlach, E. and Paldam, M. (2009). A farewell to critical junctures: Sorting out long-run causality of income and democracy. *European Journal of Political Economy*, 25(3):340–354.
- Guriev, S. and Zhuravskaya, E. (2009). (Un)happiness in transition. *The Journal of Economic Perspectives*, 23(2):143–168.
- Gwartney, J., Lawson, R., and Norton, S. (2015). Economic freedom of the world 2015 annual report. The Fraser Institute.
- Hall, J. C. and Lawson, R. A. (2014). Economic freedom of the world: an accounting of the literature. *Contemporary Economic Policy*, 32(1):1–19.
- Hall, J. C., Stansel, D., and Tarabar, D. (2015). Economic freedom studies: a survey. *Economic Behavior, Economic Freedom, and Entrepreneurship*, page 38.
- Hall, R. E. and Jones, C. I. (1999). Why do some countries produce so much more output per worker than others? *The Quarterly Journal of Economics*, 114(1):83–116.
- Hanushek, E. A. and Woessmann, L. (2012a). Do better schools lead to more growth? cognitive skills, economic outcomes, and causation. *Journal of Economic Growth*, 17(4): 267–321.
- Hanushek, E. A. and Woessmann, L. (2012b). Schooling, educational achievement, and the latin american growth puzzle. *Journal of Development Economics*, 99(2):497–512.
- Inglehart, R., Foa, R., Peterson, C., and Welzel, C. (2008). Development, freedom, and rising happiness: A global perspective (1981–2007). *Perspectives on Psychological Science*, 3(4):264–285.
- Jones, C. I. and Romer, P. M. (2010). The new kaldor facts: Ideas, institutions, population, and human capital. *American Economic Journal: Macroeconomics*, 2(1):224–245.
- Joskow, P. L. (2008). Introduction to new institutional economics: A report card. *New institutional economics: A guidebook*, pages 1–19.
- Knack, S. and Keefer, P. (1995). Institutions and economic performance: cross-country tests using alternative institutional measures. *Economics & Politics*, 7(3):207–227.
- Koopmans, T. C. (1965). On the concept of optimal economic growth.
- La Porta, R., Lopez-de Silanes, F., and Shleifer, A. (2008). The economic consequences of legal origins. *Journal of Economic Literature*, 46(2):285–332.
- Lefcourt, H. M. (2014). *Locus of control: Current trends in theory & research*. Psychology Press.

- Lipset, S. M. (1959). Some social requisites of democracy: Economic development and political legitimacy. *American Political Science Review*, 53(01):69–105.
- Lochner, L. (2011). Non-production benefits of education: Crime, health, and good citizenship. *Handbook of Economic Education* 4: 183-283.
- Lucas, R. E. (1988). On the mechanics of economic development. *Journal of Monetary Economics*, 22(1):3–42.
- Marchiori, L., Shen, I.-L., Docquier, F., et al. (2013). Brain drain in globalization: A general equilibrium analysis from the sending countries' perspective. *Economic Inquiry*, 51(2):1582–1602.
- Marshall, M., Jaggers, K., 2014. Polity IV Project. Political Regime Characteristics and Transitions, 1800–2013. Center of Systemic Peace, Vienna VA.
- Mauro, P. (1995). Corruption and growth. *The Quarterly Journal of Economics*, pages 681–712.
- Moore, B. (1966). *Social origins of democracy and dictatorship*. Boston: Beacon.
- Nikolaev, B. and Salahodjaev, R. (forthcoming). Historical prevalence of infectious diseases, cultural values, and the origins of economic institutions. *Kyklos*.
- North, D. C. (1971). Institutional change and economic growth. *The Journal of Economic History*, 31(01):118–125.
- North, D. C. (1981). *Structure and change in economic history*. Norton.
- North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge University Press.
- North, D.C. (1991). Institutions. *Journal of Economic Perspectives*, 5(1):640–655.
- North, D. C. (1992). *Transaction costs, institutions, and economic performance*. ICS Press San Francisco, CA.
- North, D. C. (1994). Economic performance through time. *The American Economic Review*, 84(3):359–368.
- North, D. C. and Thomas, R. P. (1973). *The rise of the western world: A new economic history*. Cambridge University Press.
- Papaioannou, E. and Siourounis, G. (2008). Democratization and growth. *The Economic Journal*, 118(532):1520–1551.
- Piketty, T. (1999). The information-aggregation approach to political institutions. *European Economic Review*, 43(4):791–800.

- Przeworski, A., Limongi, F. (1997). Modernization: Theories and facts. *World Politics*, 49(2), 155-183.
- Przeworski, A., Alvarez, M. E., Cheibub, J. A., Limongi, F. (2000). Democracy and development: Political institutions and well-being in the world, 1950-1990. Cambridge, UK: Cambridge University Press.
- Rajan, R. G. and Subramanian, A. (2008). Aid and growth: What does the cross-country evidence really show? *The Review of economics and Statistics*, 90(4):643–665.
- Rodrik, D. (2004). Getting institutions right. CESifo DICE Report.
- Rodrik, D., Subramanian, A., and Trebbi, F. (2004). Institutions rule: the primacy of institutions over geography and integration in economic development. *Journal of Economic Growth*, 9(2):131–165.
- Roland, G. (2002). The political economy of transition. *The Journal of Economic Perspectives*, 16(1):29–50.
- Smith, A. (1776). An inquiry into the nature and causes of the wealth of nations. London: George Routledge and Sons.
- Spruk, R. and Keseljevic, A. (2016). Institutional origins of subjective well-being: Estimating the effects of economic freedom on national happiness. *Journal of Happiness Studies*, 17(2):659– 712.
- Solow, R. M. (1956). A contribution to the theory of economic growth. *The Quarterly Journal of Economics*, pages 65–94.
- Spolaore, E. and Wacziarg, R. (2013). How deep are the roots of economic development? *Journal of Economic Literature*, 51(2):325–369.
- Stansel, D. and McMahon, F. (2013). Economic Freedom of North America, 2013. Fraser Institute.
- Stiglitz, J., Sen, A. K., and Fitoussi, J.-P. (2009). Report by the commission on the measurement of economic performance and social progress. Paris: Commission on the Measurement of Economic Performance and Social Progress.