Rents and economic development: the perspective of Why Nations Fail

Daron Acemoglu1 · James A. Robinson2

Received: 27 June 2018 / Accepted: 28 January 2019 / Published online: 13 March 2019 © Springer Science+Business Media, LLC, part of Springer Nature 2019

Abstract

We present the approach to comparative economic development of Why Nations Fail. Economic prosperity requires inclusive economic institutions—those which create broad based incentives and opportunities in society. Extractive economic institutions, which lack these properties, create poverty. Variation in economic institutions is created by differences in political institutions. Inclusive economic institutions are the result of political choices which arise under inclusive political institutions: a strong state and a broad distribution of power in society. When either of these conditions fails one has extractive political institutions that lead to extractive economic institutions. We relate our analysis to Tullock’s notion of ‘rent seeking’.

Keywords Rents · Institutions · Inclusive · Extractive · Politics

JEL Classification D72 · D78 · O00 · O43

1 Introduction

Why are some countries rich and others poor? There can be many potential explanations for this, but Fig. 1 is inconsistent with many of them. It shows the Korean peninsula at night. The South is bright, the North is dark except for a little brightness around the capital city Pyongyang. This striking photograph is indicative of large differences in economic development and welfare. In terms of income per capita, the level in the South is around 20

This paper was written to commemorate the 50th anniversary of Gordon Tullock’s 1967 paper which initiated the concept of “rent seeking”.

* James A. Robinson
jamesrobinson@uchicago.edu
Daron Acemoglu
daron@mit.edu

1 Department of Economics, Massachusetts Institute of Technology, E52-380, 50 Memorial Drive, Cambridge, MA 02142, USA

2 Harris School of Public Policy, University of Chicago, 1307 East 60th Street, Chicago, IL 60637, USA
times that in the North, and life expectancy in the South is 10 years longer. These differences are not old. In fact they did not exist in 1945 but emerged subsequently.

What caused these differences? It cannot have been geography; since this is very similar on either side of the 38th parallel, the arbitrary border between the Koreas. It cannot have been culture; the Korean peninsula has a common language and history and if the culture had been different in different regions, one would have expected these differences to have emerged before 1945.

In fact, the explanation is obvious: the different economic institutions that the two countries adopted after they separated at the end of the Second World War. The North adopted a centrally planned economy inspired by the Soviet Union, while the South adopted an economy based on private property rights and resource allocation through markets, albeit with a fair amount of government intervention to encourage investment, particular economic sectors and exporting (Lane 2017). These two different sets of economic institutions generated radically different patterns of incentives and opportunities. In the South they were consistent with rapid investment in physical and human capital and the adoption and innovation of superior technology. These last aspects have been regarded as critical for economic growth.

Fig. 1 The Korean Peninsular at night
since the research of Solow (1957) who showed that it was improvements in the way that factors of production were used, what he called Total Factor Productivity, that drove long run growth (and see Hsieh and Klenow 2010, on cross-country differences). In the North there was not investment, but rather persistent famine.

If these huge differences in institutions had such profound effects on prosperity, why didn’t North Korea adopt economic institutions that would have had the same impact? There can be different sorts of explanations for this. The main one in economics would be that the North Koreans simply didn’t understand the consequences of organizing the economy the way they did (Acemoglu 2003). It could be that North Korea just had worse economists. For example, during the Presidency of Alan García in Perú between 1986 and 1990, his economic policy was driven by a group of ‘heterodox’ economists who published a book called ‘Heterodox Perú’ (Carbonetto et al. 1987). Figure 2 reproduces one of their key diagrams. It depicts an “unusual offer curve” which implies that an expansion of aggregate demand would lead to an increase in real GDP and a fall in the price level, though the microfoundations for the falling price levels are not clear. Whatever the case, the application in Perú of ‘Heterodox Perú’ led to a boom in real incomes and real wages which lasted for about two years, followed by a severe contraction and accompanying hyperinflation which reduced living standards far below where they had been in 1986 (see Rodrik 1996). 

It seems very unlikely that comparative development can be explained by the quality of economists, or by the fact that some countries are better informed about what good economic institutions are. Many international organizations like the World Bank, USAID, the UNDP, and the International Monetary Fund disseminate best practices about institutions, yet they are ignored. Moreover, it became evident several decades ago that the economic institutions of North Korea create poverty. This ought to have

Fig. 2 ‘An unusual offer curve’: Heterodox Perú
been particularly apparent in North Korea after the Chinese abandoned related institutions after 1978, yet the government has done little to change them.

In *Why Nations Fail* we argue that it is indeed differences in economic institutions that explain the comparative development of the Koreas, and the rest of the world. We make a distinction between inclusive economic institutions, which create broad based economic incentives and opportunities, and extractive economic institutions, which do not. The source of these institutions is political. They are chosen collectively as a consequence of social choices which are heavily shaped by political institutions. A society gets inclusive economic institutions because its political institutions generate them as an equilibrium phenomenon. We call institutions which do this inclusive political institutions, which have two dimensions: a broad distribution of political power and a strong (or effective or capable) state. When either condition fails—when power is narrowly concentrated or when there is a weak or ineffective state—we say there are extractive political institutions.

In a nutshell, poor countries have extractive economic institutions as a consequence of extractive political institutions. Rich countries have the opposite combination, inclusive economic institutions underpinned by inclusive political institutions.

The word extractive is chosen because the motivation for creating institutions which impoverish society is that such institutions have important distributional effects. In this, our work follows the seminal work of Tullock (1967) who proposed the notion of ‘rent seeking’ to argue that the welfare costs of a distortionary economic institution like monopoly were actually much higher than the static deadweight losses would suggest. This is because individuals would invest and expend resources to capture the rents, and similarly others would invest in trying to protect themselves from such rent seeking. Tullock (1975) further showed that rents tend to be capitalized in ways which benefit only the initial incumbents, making future rent holders highly resistant to efficiency promoting reform. Using his terminology, extractive institutions are designed to create and capture rents—induce a return on an asset which is greater than its next best alternative. Our work extends these ideas in two important ways. First, as argued in Acemoglu and Robinson (2000, 2006), a key building block of our work is that inefficient economic institutions are chosen not just to create rents, but to solidify the political power of elites. It is this feature that makes it difficult to find efficient solutions to the problems of economic rents, and potentially generates much greater inefficiencies. Second, we propose a political theory which can help account for the variation across time and space in the incidence of extractive economic institutions.

A related political economy theory was proposed by North et al. (2009) who make a distinction between a ‘natural state’ with a ‘limited access order’ and an ‘open access order’, which loosely relates to our dichotomy between extractive and inclusive institutional complexes. Nevertheless, our theory is distinct in several ways. First, their argument as to why rents exist in natural states is that they are necessary to control elite violence. In our argument rents are simply a way for politically empowered elites to exploit powerless non-elites, and elite violence is not central. Second, their theory of the transition to open access orders emphasizes that this arises as a consequence of changing elite calculations about the costs and benefits of different orders. In contrast we emphasize that elites never willingly create inclusive institutions, they are forced to do so by the collective action of society. Finally, their assessment of the timing of the creation of open access orders in currently rich countries is very different from our assessment about the emergence of inclusive institutions. In England, for instance, they date the emergence of an open access order to the middle of the nineteenth century, while we emphasize the seventeenth century and the Glorious Revolution of 1688.
The paper proceeds as follows. In Sect. 2 we first explain in more detail our concept of economic institutions. Section 3 then expands on our notions of political institutions. Section 4 puts the economics and politics together and uses a simple matrix to show how they interact. Section 5 concludes.

2 Economic institutions

2.1 Inclusive

Perhaps the most important idea in economics is that a particular set of economic institutions—well-enforced private property rights and competitive markets—leads to an efficient allocation of resources. This result is enshrined in the First Welfare Theorem. This theorem applies to both static economies and intertemporal economies. In this latter case, the theory of economic growth shows how the same structure of institutions, property rights and competitive markets encourages physical and human capital accumulation and the adoption and creation of technology. Of course there may be many market failures connected to these processes, and in an intertemporal world there may be many missing markets which mean that the First Welfare Theorem does not hold. Even when it doesn’t, it provides a set of tools, and intuitions, about what to do to improve resource allocation and consequently prosperity and welfare.

The thrust of these arguments is that the activities that make a society prosperous are structured by the rules of a society: the institutions. Though neoclassical economic theory does not have this distinction, in reality these institutions are both formal and informal. By formal we mean, following North (1990), the written de jure rules such as the law, government regulations, etc. By informal we mean social norms and regular patterns of interaction. Both types of institutions are important for incentivizing different actions and penalizing others. For example, while the Arrow–Debreu model assumes that property rights on assets are costlessly and perfectly enforced, if one looks at how such enforcement actually happens in the world, this typically involves both formal and informal institutions. There will be laws about how property can be owned and transferred and what happens if these rules are violated. But laws are not well enforced in much of the world and keeping property rights secure in such a context may require social norms and informal institutions to act where the written rules do not.

We emphasize the connection between the security of property rights and incentives, not because this is the only economic institution that matters, or that it is an obvious and critical difference between North and South Korea, but for two other simple reasons. First, it is so intuitive that people will only invest when they expect to enjoy the fruits of their efforts. The connection between property rights and investment is at the heart of economic theory (e.g. Grossman and Hart 1986). It is also illustrated by many empirical cases. For instance, Chinese economic growth after 1978 was initially driven by the introduction of individual incentives in agriculture which entailed making people the residual claimants on their efforts, in effect re-defining property rights on production (the “household responsibility system”) (see e.g. Naughton 2018). Though this system ended up being institutionalized throughout the economy by the government, it actually started out as an informal institution as Chinese peasants spontaneously abandoned collectivized agriculture. Second, variation in the extent of security of property rights has been argued to account for large differences in patterns of comparative development
(North and Thomas 1973). Indeed, Acemoglu et al. (2001, 2002) used variation in a measure of the security of property rights, absence against risk of expropriation as a proxy for a broad cluster of economic institutions. They showed that variation in this explained the preponderance of the difference in levels of income per capita in the world today.

The mostly implicit nature of institutions in neoclassical theory makes it useful to have a language which is more flexible to discuss institutional details in the world and which allows us to abstract from the many idiosyncratic differences which arise, for example in studying systems of property rights, or labor market institutions. In reality these differ a lot from simple notions of a competitive market. These deviations may be for good reasons, to solve problems of market failures, or they may be for bad, for example designed to create rents for some of the participants. The notion of inclusive economic institutions is designed to do this. We define them as institutions which provide economic incentives and opportunities for a broad cross section of society. There is not one way that this can be done. For example, the United States and Sweden are both relatively inclusive by world historical standards and yet their labor market institutions, for instance, are quite different. Sweden has strong trade unions and national wage bargaining. The United States has neither. Yet they both create broad based incentives and opportunities for their citizens.

To see what inclusive economic institutions can do let’s return to South Korea. The example of microwave ovens is a classic instance of the adoption of superior technology, a critical part of economic growth. As recently as 1976 nobody produced a microwave oven in South Korea (this story is from Brander 1992, pp. 798–799). In that year Samsung, then an unknown chaebol (one of Korea’s family owned industrial conglomerates), bought an oven from the US company General Electric. It was called a Jet 230. One of Samsung’s engineers dismantled it and tried to figure out how it worked. The first attempt at a copy melted. The second one melted too. It took two years to build a version that worked and in 1979 Samsung finally sold a microwave. In 1980 it exported 1000 to the US. It was a promising start but production was held back because Samsung did not themselves directly produce magnetrons, a key part of a microwave. In 1983 they bought a magnetron factory in the US, dismantled it, and re-built it at home. Starting from nothing in 1976, in 1987 Samsung had 20% of the world microwave market and was the largest producer.

Meanwhile North Korea was still struggling with electricity or light bulbs, or perhaps both. Neither is a very new or complex technology. The light bulb was invented by Thomas Edison and patented in 1880. Edison was a prolific inventor and held over 1000 patents at one time. A patent is an interesting example of an inclusive economic institution. They were included in the U.S. Constitution and the relevant clause states that the U.S. Congress shall have power “to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.” The first patent board sat in 1790. It was considered so important that Thomas Jefferson sat on it and four years later, in 1794, it granted its first really momentous patent, to one Eli Whitney for his “cotton gin”. Critically, patents were open to everyone who paid the same fee and were able to call on the state to enforce their patents. The consequences of this inclusivity for the nineteenth century U.S. were documented by Khan and Sokoloff (1990). They studied the social background of “great inventors” and showed how diverse these were. Ideas, talent, creativity, and entrepreneurship are spread very broadly in society.
and to get innovation a society needs to create an institutional structure that can tap into all that latent talent. The patent system was part of that institutional structure.1

Patents are designed to solve a market failure. An invention is, at heart, a new idea. But ideas are non-rivalrous goods which may be easily copied by others. This implies that an inventor can only hope to benefit from a fraction of the wealth that their idea creates. Patents are supposed to alleviate this market failure, make it more difficult for people to freely copy others’ ideas, and therefore align the private with the social benefits of invention. That they were a key to stimulating innovation in the industrial revolution can be seen from the data in McLeod (2002). In the U.S. case Gordon (2017) notes

Perhaps the most important government activity to stimulate growth was the patent office and the process of patent approval (p. 312).

Patents are still important today. In the 1980s when Bill Gates was building up Microsoft to become the world’s richest man, courts allowed patents to be taken out of computer software for the first time. Today Microsoft has over 6000 patents. Steve Jobs, the former CEO of Apple, had his name on more than 300 patents.

2.2 Extractive

Though inclusive economic institutions may create prosperity, that does not mean that people with the power to shape institutions want to create them. As one of the richest men in the world, Bill Gates has some stiff competition, including Mexico’s Carlos Slim. Yet Carlos Slim did not make his fortune through innovation like Gates. Instead he made it mostly through a monopoly that was privatized to him intact in 1990—this was Telmex which controlled 100% of landline telephones in Mexico at the time. Though there was a regulatory framework in place, in practice Telmex “seemingly exercises its market power at will” (OECD 2012, p. 54). One way it does this is by using the legal instrument of an amparo (literally “protection”) which allows a Mexican citizen to claim that a particular law does not apply to them. The lack of a rule of law is institutionalized into the law!

The OECD calculated that between 2005 and 2009, distortions due to monopoly power reduced Mexican GDP by USD 129.2 billion or 1.8% GDP per annum (OECD 2012, p. 9). This amount of money was far more than Slim’s wealth so this is not simply a case of taking money from ordinary Mexicans and giving it to Carlos Slim, the consequence is to simultaneously lower most—and that’s a key point, most—but not all, Mexicans’ living standards. Moreover, the OECD’s calculation is just the type of calculation of the losses from monopoly that Tullock criticized in 1967, since it only looks at the static welfare loss, or the size of the ‘Harberger triangle’ (see OECD 2012, Annex C, pp. 137–140). If one took into account the amount of resources which are expended by Slim and his collaborators to preserve their telecommunications monopolies (they have now spread elsewhere in Latin America), the economic losses would be much larger, as Tullock emphasized.

Slim’s telecommunications monopolies are classic examples of extractive economic institutions and the incentives that create them. While they impoverish ordinary Mexicans, they have made him and his family very rich. To have a monopoly you need entry barriers so most Mexicans do not have opportunities or incentives to innovate or create businesses,

---

1 To the extent that this is not true anymore in the U.S. it would be a key sign that institutions were no longer as inclusive as they have been in the past, on which see Bell et al. (2017).
at least in this sector. It is exactly the opposite of the broad based incentives and opportunities you need to create prosperity.

3 Political institutions

But why do economic institutions vary? Why is it that Mexico has more extractive economic institutions than the United States? Could it be that Bill Gates just didn’t think about being a monopolist? The truth is far from this. Gates did indeed attempt to exert market power, as many do in the U.S. In fact Gates was prosecuted by U.S. Federal antitrust authorities. These actions started in 1992 and eventually in 1999 Microsoft was found guilty of violating clauses of the Sherman Anti-Trust Act. Microsoft appealed and an agreement with the Department of Justice was reached in 2001. The prosecution of Slim under Mexican anti-trust laws would be unthinkable. For one thing he has the *amparo* to block that.

These examples, and that of the Koreas above, suggest that lying behind economic institutions are politics, and in particular political institutions, like the state and its ability to enforce regulations (like anti-trust) and also the nature of accountability and the distribution of power.

3.1 Inclusive

The fundamental reason that the United States has more inclusive economic institutions than Mexico is because it has more inclusive political institutions. It has a state which has the capacity and incentive to enforce rules and regulations, and it has political power that is much more broadly spread.

Return to the case of the patent system. Why did the U.S. end up with an inclusive patent system? The main reason was the relatively inclusive nature of politics at the time. As documented in Acemoglu and Robinson (2012), during the colonial period the citizens of individual U.S. states engaged in systematic contestation over political institutions which had forced elites to spread political power broadly in society. The first instance of this was the creation of the Legislative Assembly in Virginia in 1619 based on adult ‘free’ male suffrage. This was not democratic by modern standards. Women could not vote and neither could slaves, but power was broadly spread by the standards of the time. Most importantly, as a consequence of these colonial struggles, at the time of the writing of the Constitution power was sufficiently widely distributed that it would have been impossible to create some type of selective system for the allocation of patents, perhaps as a political favor or way of distributing rents.

In fact, the fight against such a use of patents was at the heart of the struggle against the monarchy in seventeenth century England with the Statute of Monopolies of 1624 blocking the right of kings to effectively create monopolies for their friends and supporters via ‘letters patent’.

The democratic and accountable nature of the Congress was the first line of defense against an extractive patent system. The next was the Bill of Rights. The circumstances in which this came about are important for the history of inclusive political institutions in the U.S. The re-writing (or replacement) of the Articles of Confederation by James Madison and his collaborators in Philadelphia 1788 was precisely an attempt to create a stronger central state with a powerful executive President and a national fiscal and monetary system. But the backlash against this project, which many saw as threatening the rights and
autonomy of the states, forced Madison and others to concede the Bill of Rights, the first ten amendments which guaranteed individual rights. As the state got stronger, political power was more securely dispersed in society, an interesting coevolution of the two dimensions of inclusive political institutions.

The stronger state which emerged out of this process of institutional change had profound effects on economic growth and innovation in the subsequent two centuries. Initially, the most important area of expansion was in the construction of infrastructure and communication. The Federal state formed a vast network connecting the country. At the hub of this web was the post office, brought into existence by the Post Office Act of 1792. This was soon the most important government employer. By 1816, 69% of federal employees were postmasters and by 1841 this had increased to 79% (John 1995, p. 3). As John (1995, p. 4) shows, in this epoch

for the vast majority of Americans the postal system was the central government.

Acemoglu et al. (2016) hypothesize that the presence of the U.S. state in the guise of the post office was significant for innovation for at least three reasons. First, by facilitating flows of information and knowledge, it helped ideas to spread and facilitated the creation of new ones. Second, for the intuitive reason that it made patenting and securing intellectual property rights logistically easier. Khan (2005, p. 59) notes that “rural inventors in the United States could apply for patents without serious obstacles, because applications could be submitted by mail free of postage. The US Patent and Trademark Office also maintained repositories throughout the country, where inventors could forward their patent models at the expense of the post office. As such, it is not surprising that much of the initial surge in patenting during early American industrialization occurred in rural areas.” Finally, the presence of a post office is indicative of a much broader state presence and functionality, for example via legal services and regulation, access to land, and security of other forms of property rights, which are requisites for most innovative activity. By the 1830s, for instance, the post office was a modern bureaucratized institution.

Acemoglu et al. (2016) find a highly significant correlation between the presence and number of post offices in a county and patenting activity. Moreover, the opening of postal offices leads to increases in patenting activity and not the other way around, suggesting that it is not a simple reverse causality story inducing this correlation. Though the results rely on panel data regressions with fixed effects, and thus control for time invariant unobservables, they must be treated with caution as to whether they estimate the causal effect of state presence on innovation. Nevertheless, they support the qualitative evidence presented in John (1995) and the hypothesis that the construction and spread of the U.S. state in the nineteenth century did have a positive effect on innovation, exactly as the theory of inclusive institutions predicts it should.

3.2 Extractive

The type of political institutions one observes in places with extractive economic institutions are very different. When Carlos Slim got the telecom monopoly privatized to him, Mexico was run by a one-party state, the PRI (the ‘Institutional Revolutionary Party’), which had been in power continuously since 1929 (Haber et al. 2008 is the best analysis). There was no democracy and the distribution of power was narrow and used in a clientelistic way to perpetuate the PRI in power and enrich its insiders. At the same
time the Mexican state had not the capacity, nor the inclination, to enforce the rules that it had, or to raise taxes and provide public goods which were critical for economic growth.

In many ways this situation persists today. In 2014 Carlos Slim’s son-in-law got the contract to design the new airport for Mexico City and Slim himself then got the contract to build it.

The complication with political institutions is that they combine two dimensions. It is useful to unpack these in a way which illustrates how extractive institutions emerge. We do this in Fig. 3. The rows of this matrix capture the distribution of political power, narrow or broad. The rows capture the strength of the state, weak or strong. The top right cell of the matrix contains countries with inclusive political institutions, like the United States and South Korea that have both a broad distribution of political power and a strong state. The other three cells contain parts of the world with extractive political institutions. Some places, like the Democratic Republic of the Congo, have both a weak state and a narrow distribution of power. President Joseph Kabila, for example, was supposed to have held a presidential election by December 2016 in which he was constitutionally blocked from running (because he was term limited). The election was delayed for two years and Kabila remained unconstitutionally exercising executive power in the country. In the two other cells of the matrix one of the requirements for inclusive political institutions fails, but not the other. For example, in the top left cell, we have a situation characteristic of modern China with a strong state but a narrow distribution of political power. In the bottom right cell we have a situation with a weak state but a broad distribution of power. This would be true of modern Somalia, where adult males in the decentralized clan structures make collective decisions. Indeed, the famous ethnography of these clans is called *A Pastoral Democracy* (Lewis 1961). Yet Somalia has effectively no state at all, and never really has had. The situation in modern Lebanon is similar where there is a state but power lies in the decentralized structure of communities. In May 2018 Lebanon had a parliamentary election which should have taken place in 2013 but was endlessly postponed. This causes little contention in the country since the state exercises little authority over the communities.

**Fig. 3** The dimensions of political institutions

| Distribution of Power | Narrow   | Broad    |
|-----------------------|----------|----------|
|                       | China    | USA      |
|                       | North Korea | UK      |
|                       | Central African Rep. | South Korea |
|                       | D.R. of Congo | Lebanon |
|                       |          | Somalia  |
We can summarize the way that economic and political institutions combine with the help of another simple matrix, Fig. 4. The columns represent the two different types of economic institutions, extractive and inclusive. The rows represent the political institutions, extractive and inclusive. So far we have been emphasizing two cells of this matrix. In the bottom right we have the combination of extractive economic institutions underpinned by extractive political institutions. This is where poor countries are. We have also stressed the top left cell, with both sorts of institutions inclusive. This is where rich countries are. Both of these cells are very stable since they create feedback loops which tend to reinforce the institutional equilibrium.

Consider extractive societies. When power is narrowly distributed then extractive economic institutions are used to concentrate the benefits from production and exchange in the hands of those with power, or with the right connections. The distribution of resources that this generates naturally tends to reproduce the distribution of power that led to it. Contrast this with inclusive societies. Here the broad distribution of power tends to spread resources more broadly which again tends to re-create the distribution of power that led to it. In Acemoglu and Robinson (2012) we call the cluster of mechanisms that tend to reproduce extractive equilibria a ‘vicious circle’. We call the cluster that reproduces an inclusive equilibrium a ‘virtuous circle’. These mechanisms explain why under-development is such a persistent, and political problem. They also explain that development is persistent. Though in an inclusive society, like the U.S., there are always incentives to try to move the economy and polity in a more extractive direction, there are also features of the equilibrium which make this difficult.

---

**Fig. 4** The institutional equilibrium

| Economic Institutions | Inclusive | Extractive |
|-----------------------|-----------|------------|
| **Political Institutions** | USA       | UK         | South Africa |
| Inclusive             | South Korea |            | Zimbabwe     |
| Extractive            | ?         | China      | North Korea  |

---

2 See Lawson and Clark (2010) for a related diagram examining the interaction between ‘economic freedom’ and ‘political freedom’.
The ‘problem of development’ is how to move from the bottom right cell to the top left cell. To do this it seems likely that you have to move through one of the off diagonals, which combine extractive and inclusive in uneasy combination.

What about the off diagonals? What happens there? While the cells on the dominant diagonal of the matrix may be stable, the off-diagonals are unstable. To see this let’s consider a thought experiment. In 1994 South Africa became a democracy and Nelson Mandela became president. Prior to that South Africa had been run by a regime which is typically called ‘Apartheid’. Apartheid, literally ‘Apart’, though it had an ideological veneer of separate development of blacks and whites, was at heart a set of extractive institutions designed by whites to exploit blacks. Labor market institutions, for example, were designed to keep black wages low to ensure large profits in mining and agriculture and to make sure blacks did not compete with white workers. One of the ways this was done was via the ‘Colour Bar’ (see Feinstein 2005, for a survey of Apartheid economic institutions). Introduced initially in the mining industry and spreading to the whole economy by the 1920s, the Colour Bar banned blacks from undertaking any skilled occupation or employment. Only whites could do them. It killed the incentives and opportunities of black people, but it generated huge rents for white people. It is a classic example of an extractive economic institution.

Now return to Mandela’s election. At the time South Africa was firmly in the lower right cell. The democratization moved it to the top right, a combination of inclusive political institutions and extractive economic institutions. But this combination was not stable. Once political power was extended to black people it was impossible for extractive economic institutions like the Colour Bar to persist, and indeed the Apartheid regime had already been dismantling many of these institutions in anticipation of this. Thus the movements towards more inclusive political institutions naturally led to a momentum towards more inclusive economic institutions.

This path through the matrix is quite a common one historically. Our theory predicts that it is politics that drives economics and what leads to transitions in economic institutions is change in political institutions, typically through the collective action of those who are excluded by extractive political institutions. Once these become more inclusive then it is natural that economic institutions will become more inclusive. This is the path that Britain took in the early modern period (see Acemoglu and Robinson 2012, Chapter 7).

The path that South Africa traversed in the 1990s is not inevitable however. Though the top right cell of the matrix is unstable, the theory does not predict in which direction a society will move and this will depend on the details of individual cases. For example, extractive economic institutions tend to create highly unequal distributions of wealth and pockets of rents. Newly inclusive political institutions may not be very consolidated and the presence of such wealth and rents may induce nascent inclusive elites to try to grab them. To consolidate such a grab, they may try to reverse the move to inclusive political institutions. This is precisely what happened in Zimbabwe after independence. Though in 1980 Zimbabwe moved from the bottom right cell to the top right cell, the concentration of assets in the hands of a small number of whites led to an asset grab by the new political elite, led by Robert Mugabe and his cronies, such as his successor as president Emmerson Mnangagwa. To be sustainable the inclusiveness of political institutions had to be put into reverse, which led to the overthrow of democracy, and the persecution, murder and imprisonment of opponents. Zimbabwe moved back into the bottom right of the matrix and indeed has lower levels of income per capita today than it did in 1980.

Just as the top right cell of the matrix is unstable, so is the bottom left. Here is the combination of inclusive economic institutions with extractive political institutions. The prime
example of such a combination would be China since 1978. At that time China was a very poor country with low productivity and backward technology. The reforms spread by Deng Xiaoping then moved economic institutions, as we described above, in a more inclusive direction. The successes of the rural sector then spread to the industrial sector and, just as any economist would predict, China flourished as the Communist Party gave up on trying to control every aspect of economic activities. The state sector contracted and private enterprise flourished.

Yet it did so in the context of the persistent dictatorship of the Chinese Communist Party (CCP). Our theory says that this combination, of extractive and inclusive, is not stable. China has experienced a period of what Acemoglu and Robinson (2012) call “extractive growth,” and there are many examples of this in world history—for instance Argentina in the 50 years before 1920 and the Soviet Union between the late 1920s and the 1970s. Yet these experiences ultimately peter out and go into reverse. The reason is that unchecked and concentrated political power always ends up getting exploited to the detriment of the economy. There are many ways in which this can happen which depend on the context and the details of the institutions.

It is interesting to note of course that South Korea, when it started its rapid experience of economic growth in the 1960s also moved first into the lower left cell of the matrix. In the 1980s however it began a slow transition towards a much broader distribution of power and moved to the top left cell of the matrix. This is a potential dynamic path for China as well, though we regard this as somewhat unlikely. The South Korean military did not have a philosophy of rule, but the CCP does. Movements towards the top left were ruthlessly repressed in 1989 in Tiananmen Square and Deng Xiaoping’s attempt to create a set of term limits for president was recently reversed by Xi Jinping who is busy creating the type of personalized and unchecked power that Chinese leaders like Mao Zedong enjoyed and abused. The history of modern China, from the Great Leap Forward to the Cultural Revolution, shows the welfare consequences of such a set of political institutions. This makes it more likely that China will travel the analogous path as Zimbabwe, moving back into the lower right cell of the matrix, which is where it was in 1978.

Despite the stability of the bottom right and top left cells, being on the diagonal is not a permanent state of affairs either. Societies are subject to many shocks, and the large ones, by changing economic circumstances or the distribution of political power, can dislocate a society with extractive political and economic institutions and create room for change.

In Why Nations Fail we also articulated a theory of how such institutional change takes place, emphasizing the role of critical junctures; moments where big shocks or new opportunities alter circumstances, power-distributions and trade-offs which can lead to substantial institutional divergences in ways which depend sensitively on initial conditions.

The discovery of the Americas after 1492 is an interesting example (see Acemoglu et al. 2005). This shock created new possibilities for European societies, but it did not predetermine what would happen. This was because the impact was filtered through initial conditions and the institutions of different societies. In Spain a period of the consolidation of absolutist rule over society had been initiated by the “reconquest” of the south of the country from the “Moors,” which finished in the late fifteenth century. Monarchs, such as Charles V and Philip II, took advantage of the property rights the crown could assert over the mineral wealth in the Americas to undermine the functioning of representative institutions such as the Cortez. They were also able to restrict entry by Spanish merchants into the opportunity to trade with the Americas. The increased absolutism of the crown pushed the economic institutions of Spain in a much more extractive direction, undermining opportunities and property rights and tipped the country into a long decline, both relative and absolute. Urbanization, for example,
decreased between the sixteenth and eighteenth centuries and real wages were substantially lower in the eighteenth century than they had been in the fifteenth (Álvarez-Nogal and Prados De La Escosura 2013).

In Britain the situation was a little different. After having narrowly escaped being invaded by Spain in 1588, Britain tentatively launched on her own model of colonial expansion in the Americas. Yet when she did so the monarchy was weaker than in Spain and was unable to assert property rights over income streams generated by colonization or restrict access to trade and economic opportunities. Thus the discovery of the Americas created an impulse towards a much larger and wealthier bourgeoisie. This new class was frustrated by incipient absolutism and threats to property rights and economic opportunities emanating from the crown (Jha 2015). They therefore sided with Parliament in the English civil war of the 1640s that stopped the first attempt of the Stuart monarchs to create absolutism in its tracks. The second attempt, by James II in the 1680s, ended in the same way with the Glorious Revolution.

The different social and institutional dynamics that led to the Glorious Revolution created a broad coalition composed of an extensive cross section of society in the conflict with James II (Pincus 2009, Chapter 8). This was important in generating the transition to more inclusive institutions. This was because to mobilize a broad coalition it becomes attractive to promise public goods and universal principles which appeal to all (rather than specific benefits tailored to individuals or narrow interests) (Thompson 1975). When conflicts arise over institutions in the absence of a broad coalition then societies often are subject to the ‘iron law of oligarchy’ whereby though an extractive elite is displaced, it is only replaced by a new elite without a movement towards more inclusive institutions (Michaels 1915; Acemoglu and Robinson 2012, Chapter 12).

5 Conclusion

In 1967 Gordon Tullock proposed that the desire to create and capture rents was far more distortionary than had previously been thought. His work ended up coining the term ‘rent seeking’ (Krueger 1974) which has become a central idea in research on the political economy of development. It took a long time to provide causal evidence that such rent seeking, in the guise of ‘extractive institutions’, provides the dominant explanation for patterns of comparative development we see in the world today and historically, but this is what Acemoglu et al. (2001, 2002) did. Yet the desire to manufacture and defend rents is a constant in human society, in this Carlos Slim and Bill Gates are no different. What is different however is the structure of political institutions that they live in. This made it much more difficult for Gates to create monopolies and rents and it pushed his talents and energies into innovation and in a direction much more aligned with the welfare of society. This difference between Slim and Gates and the two societies they live in is the story of all poor and rich countries.

Acknowledgements We thank two anonymous referees and the editor for their comments and suggestions and Alex Carr for her editorial assistance.

References

Acemoglu, D. (2003). Why not a political Coase theorem? Journal of Comparative Economics, 31, 620–652.
Acemoglu, D., Johnson, S., & Robinson, J. A. (2001). The colonial origins of comparative development: An empirical investigation. *American Economic Review*, 91(5), 1369–1401.

Acemoglu, D., Johnson, S., & Robinson, J. A. (2002). Reversal of fortune: Geography and institutions in the making of the modern world income distribution. *Quarterly Journal of Economics*, 118, 1231–1294.

Acemoglu, D., Johnson, S., & Robinson, J. A. (2005). The rise of Europe: Atlantic trade, institutional change and economic growth. *American Economic Review*, 95(3), 546–579.

Acemoglu, D., Moscona, J., & Robinson, J. A. (2016). State capacity and American technology: Evidence from the 19th century. *American Economic Review*, 106(5), 61–67.

Acemoglu, D., & Robinson, J. A. (2000). Political losers as barriers to economic development. *American Political Science Review*, 100(1), 115–131.

Acemoglu, D., & Robinson, J. A. (2006). Economic backwardness in political perspective. *American Political Science Review*, 100(1), 115–131.

Álvarez-Nogal, C., & Prados De La Escosura, L. (2013). The rise and fall of Spain (1270–1850). *Economic History Review*, 66(1), 1–37.

Bell, A., Chetty, R., Jaravel, X., Petkova, N., & Van Reenen, J. (2017). Who becomes an inventor in America? The importance of exposure to innovation. NBER Working Paper No. 24062.

Brander, J. A. (1992). Comparative economic growth: Evidence and interpretation. *Canadian Journal of Economics*, 25, 792–818.

Carbonetto, D., et al. (1987). *El Perú heterodoxo: un modelo económico*. Lima: Instituto Nacional de Planificación.

Feinstein, C. H. (2005). *An economic history of South Africa: Conquest, discrimination, and development*. New York: Cambridge University Press.

Gordon, R. J. (2017). *The rise and fall of American growth*. Princeton: Princeton University Press.

Grossman, S. J., & Hart, O. D. (1986). The costs and benefits of ownership: A theory of vertical and lateral integration. *Journal of Political Economy*, 94(4), 691–719.

Haber, S., Klein, H. S., Maurer, N., & Middlebrook, K. J. (2008). *Mexico since 1980*. New York: Cambridge University Press.

Hsieh, C., & Klenow, P. J. (2010). Development accounting. *American Economic Journal: Macroeconomics*, 2, 207–223.

Jha, S. (2015). Financial asset holdings and political attitudes: Evidence from revolutionary England. *Quarterly Journal of Economics*, 130(3), 1485–1545.

John, R. R. (1995). *Spreading the news*. Cambridge: Harvard University Press.

Khan, B. Z. (2005). *The democratization of invention*. New York: Cambridge University Press.

Khan, B. Z., & Sokoloff, K. L. (1990). The democratization of invention during early industrialization: Evidence from the United States, 1790–1846. *Journal of Economic History*, 50(2), 363–378.

Krueger, A. O. (1974). The political economy of the rent-seeking society. *American Economic Review*, 64(3), 291–303.

Lane, N. (2017). Manufacturing revolutions—Industrial policy and networks in South Korea. http://nathanielane.info/. Accessed 12 Mar 2019.

Lawson, R. A., & Clark, J. R. (2010). Examining the Hayek–Friedman hypothesis on economic and political freedom. *Journal of Economic Behavior & Organization*, 74(3), 230–239.

Lewis, I. M. (1961). *A pastoral democracy*. London: Oxford University Press for the International African Institute.

McLeod, C. (2002). *Inventing the industrial revolution: The English patent system, 1660–1800*. New York: Cambridge University Press.

Michaels, R. (1915). *Political parties: A sociological study of the oligarchical tendencies of modern democracy*. New York: Hearst's International Library Co.

Naughton, B. J. (2018). *The Chinese economy: Adaptation and growth*. Cambridge: MIT Press.

North, D. C. (1990). *Institutions, institutional change and economic performance*. New York: Cambridge University Press.

North, D. C., & Thomas, R. P. (1973). *The rise of the western world*. New York: Cambridge University Press.

North, D. C., Wallis, J. J., & Weingast, B. R. (2009). *Violence and social orders*. New York: Cambridge University Press.

OECD. (2012). OECD review of telecommunication policy and regulation in Mexico. http://www.oecd.org/sti/broadband/49536828.pdf. Accessed 12 Mar 2019.

Pincus, S. C. A. (2009). *1688: The first modern revolution*. New Haven: Yale University Press.

Rodrik, D. (1996). Understanding economic policy reform. *Journal of Economic Literature*, 34(1), 9–41.
Solow, R. M. (1957). Technical change and the aggregate production function. *Review of Economics and Statistics, 39*(3), 312–320.

Thompson, E. P. (1975). *Whigs and hunters*. New York: Pantheon Books.

Tullock, G. (1967). The welfare costs of tariffs, monopolies, and theft. *Western Economic Journal, 5*(3), 224–32.

Tullock, G. (1975). The transitional gains gap. *Bell Journal of Economics, 6*(2), 671–678.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.