

**FORMAL  
INSTITUTIONS AND  
DEVELOPMENT IN  
LOW-INCOME  
COUNTRIES:  
POSITIVE AND  
NORMATIVE THEORY**

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## Abstract

This paper reviews and discusses the literature on formal institutions and development. We first discuss the mapping from institutions to economic development, with the main emphasis on the effect on economic growth. We thereafter discuss two main literatures on endogenous institutions. First, the positive literature focusing on how factor endowments, history, and political power interact, and influence, the evolution of institutions. Second, the normative theory of how institutions should be designed, taking into account both how this depends on initial institutions (which we term context dependent institutional design), and how institutional reform that is socially desirable, but meet political resistance from those with current political power, can be designed. A main shortcoming with the current literature, and at the same time the possibly most pressing policy question, regards the last point: how does one undertake institutional reform when those with current power see such reforms as against their own interests?

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Institutions matter for growth and inclusive development. But despite increasing awareness of the importance of institutions on economic outcomes, there is little evidence on how positive institutional change can be achieved. The Economic Development and Institutions – EDI – research programme aims to fill this knowledge gap by working with some of the finest economic thinkers and social scientists across the globe.

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## 1. Introduction

Institutions has emerged as a main, and possibly the main, explanation for income differences between countries. In this paper we aim to give an overview of parts of this literature, point out lessons and shortcomings, discuss policy implications, point out what questions the literature yet has to address, as well as where it may go next.

The paper has three main parts. In the first part, section 2, the effect of formal institutions on economic development is discussed. There seem to be a broad agreement that institutions are first order determinants of growth. There is more disagreement on how natural resource abundance affects growth – is it abundance in itself that affects growth, or is it the interaction with institutions that is crucial? Proponents of the so called resource curse argue that natural resources lower economic growth, retards democracy, and cause civil conflict. Opponents argue that there are no such robust effects. The disagreement exists largely because neither the proponents nor the opponents have convincing empirical arguments to back their claims. Those who argue that natural resources are likely to have adverse economic and political effects use measures of resource abundance that are likely to bias results in favour of a resource curse. Likewise, those who claim there is no curse, use measures of resource abundance that likely bias the results in their direction. To date no one has come up with a convincing exogenous cross country measure of resource abundance.

But in any case: the resource curse is not a “curse”. For every Nigeria or Venezuela there is a Norway or a Botswana. In some countries natural resources have induced prosperity. In others they have induced poverty. It can be argued that the literature has asked the least relevant question. Oil probably induces poverty in Nigeria, but prosperity in Norway. Is it then really the most interesting to ask what the average effect of oil in Nigeria and Norway is? And if the average effect of oil in Nigeria and Norway is negative, does this really mean that oil is a curse?

The second main part of the paper, section 3, discusses what forces shape institutions, and how institutions evolve. Historically institutions have developed influenced by the interplay between resource endowments and political power. For example, the income divergence between North America and Latin America is seen as a result of divergence in institutions, again traced back to different factor endowments interacted with the initial distribution of political power. Natural resources may thus influence institutions, and it may even be that those with current political power get an incentive to erode institutions when such resources are discovered, or their value increases. Moreover, it seems that institutions often change in a direction that is in the interest of politicians, but not the society at large. In particular, presidentialism seems an equilibrium constitution in many weakly institutionalized countries, while parliamentarism does not.

This section also discusses recent literature that argues that institutions endogenously cluster, and that development failures in different dimensions typically go hand in hand.

The third main part of the paper, section 4, takes a normative view on endogenous institutions, asking first how institutions *should* be designed, and puts emphasis on how this depends on the initial equilibrium in society. We term this context dependent institutional design. This seems to be a main area where the payoff of policy advice is high, but the literature thin.

Second, section 4 turn to the political economy of institutional reform, studying how reform can be designed under the additional constraint that reform is on the political equilibrium path. Some literature on this is discussed, but a main shortcoming of the literature so far is that it contains few guidelines on how reform should be designed and implemented when those with political power see it in their own interest to block it. This is, it is argued, a main question to which researchers should turn.

## 2. Institutions and Economic Performance

Following North and Thomas (1973), Hall and Jones (1999) and Acemoglu, Johnson and Robinson (2001, 2002, 2005a,b), the literature on institutions has become one of the most influential in the social sciences over the last decades. The main message in this literature is that institutions are main driving forces in explaining cross-country income differences.

North (1991, p. 97) asserts that “Institutions are the humanly devised constraints that structure political, economic and social interaction. They consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights).” This is a very broad definition of institutions, in that it encompasses dimensions of institutions one would often label as norms, such as taboos and codes of conduct. To explain the coevolution of economic interaction and institutional development over time, however, it seems clear that such informal constraints are important. In particular, in early small-scale societies such constraints may be the only institutions that structure interaction. Formal rules became important at much later stages of development, when societies had expanded from bands, groups and tribes into cities, states, and nations. Bowles and Gintis (2013) provide an overview of the long term endogenous coevolution of human cooperation, culture, and institutions. A main emphasis is put on (p. 197) that “The distinctive human capacity for institution-building and cultural transmission of learned behaviour allowed social preferences to proliferate. Our ancestors used their capacities to learn from one another and to transmit information to create distinctive social environments. The resulting institutional and cultural niches reduced the costs borne by altruistic co-operators and increased the costs of free-riding”. In this view, thus, institutions are key not only to explain why some nations are much richer than others, but to explain the very evolution of humans themselves, as well as why they are so successful compared to other species.

In discussing present day income differences between countries, the importance of institutions also as formal rules increases. In the remainder of the paper institutions as informal constraints such as taboos and customs will not be discussed. This is not to say that they are unimportant. But it seems useful to limit the scope of the discussion, and other papers in the research program in which this paper belongs will have as a main emphasis the study and evolution of informal institutions.

Even if we leave out institutions as informal constraints, however, there are further key issues on which one have to take a stand. In particular, one may have the view that institutions exist because they are efficient from the point of view of society – if not they would be changed; an equilibrium institution is an efficient institution. In this view, it is challenging to argue that a main cause for cross-country income differences is institutions. An alternative view is that institutions may be, and are often likely to be, inefficient. Different actors may have different preferences over which institutions they prefer, and these preferences reflect their power. Those with much political power may prefer very different institutions compared to those with little. Those who are economically privileged may prefer very different institutions from those who are not, and so on. Institutions allocate power, and also power to shape institutions themselves, as we will return to later in the paper. In this view, there is little or nothing that guarantees that, from the point of view of society, equilibrium institutions are efficient. Different agents have different preferences over

institutions, and it is unlikely that all of these preferences coincide with the institutions that are the most desirable from the point of view of society.

Formal institutions allocate political power to some actors in society. In reality, however, the political power of actors also can be highly dependent on their connections, their resources, their standing in society, and so on. Acemoglu, Johnson and Robinson (2005a) distinguish between *de jure* and *de facto* power to distinguish the two. The equilibrium outcome with regards to political and economic power (and, as we will return to, the evolution of institutions) is to be found in the interaction of *de jure* and *de facto* power.

Why do institutions affect economic outcomes? According to North (1991, p. 97) “Throughout history, institutions have been devised by human beings to create order and reduce uncertainty in exchange. Together with the standard constraints of economics they define the choice set and therefore determine transaction and production costs and hence the profitability and feasibility of engaging in economic activity.”

Four influential econometric studies have been decisive in promoting the view that a main driver of international income differences is the quality of institutions. A common denominator is these is that they acknowledge that it is not sufficient to simply look at the correlation between income and some measure of institutional quality. First, countries with high income may more easily adopt, afford, or prefer some types of institutions. In such cases of reverse causality one cannot interpret the correlation between institutions and income as causal. Second, there may be omitted variables that are correlated with both income and institutions, in which case interpreting the correlation between the two latter as a causal effect would also be misplaced.

Hall and Jones (1999, p. 114) find that “A country’s long-run economic performance is determined primarily by the institutions and government policies that make up the economic environment within which individuals and firms make investments, create and transfer ideas, and produce goods and services.”

Acemoglu, Johnson and Robinson (2001, p. 1395) conclude that “There is a high correlation between mortality rates faced by soldiers, bishops, and sailors in the colonies and European settlements; between European settlements and early measures of institutions; and between early institutions and institutions today. We estimate large effects of institutions on income per capita using this source of variation. We also document that this relationship is not driven by outliers, and is robust to controlling for latitude, climate, current disease environment, religion, natural resources, soil quality, ethnolinguistic fragmentation, and current racial composition.”

Easterly and Levine (2003) contrast different theories of international income differences and conclude (p. 3) that “We test the endowment, institution and policy views against each other using cross country evidence. We find evidence that tropics, germs and crops affect development through institutions. We find no evidence that tropics, germs and crops affect country incomes directly other than through institutions, nor do we find any effect of policies on development once we control for institutions.”

Rodrik, Subramanian and Trebbi (2004) allow the institutional explanation also to compete with alternative hypothesis that trade integration or geography is a main explanation of

income differences. They conclude that (p. 135) “Most importantly, we find that the quality of institutions trumps everything else. Once institutions are controlled for, integration has no direct effect on incomes, while geography has at best weak direct effects.” They do find, however, in line with the view of many others, that geography affects institutional quality.

## 2.1 Which institutions matter?

The above influential contributions use measures of institutions that is closely related to the security of property rights (these property rights being secure both to expropriation from other private actors, and from the government). According to Bardhan (2005, p. 500) “This preoccupation of the literature with the institution of security of property rights, often to the exclusion of other important institutions, severely limits our understanding of the development process.” The strength of this critique, however, can be questioned. First, e.g. Acemoglu, Johnson and Robinson (2001) perform robustness tests where they show their results to hold also with other measures of institutions. Second, and possibly more important, what matters is probably a cluster of institutions. In the interpretation of Acemoglu (2005, p. 1041) “In AJR (2001), we defined a broad cluster of institutions as a combination of economic, political, social and legal institutions that are mutually reinforcing.” One implication of this is that searching for which particular institutional dimension that matters, may be futile. Another implication, little studied in the literature so far, is what this means for the normative question regarding institutional design and reform implementation. We return to this issue at the end, when we discuss endogenous institutions and reform.

Nevertheless, although one may hold the view that clusters of institutions are the most important, it should also be of interest to shed light on which particular parts of this cluster are the most important. Here we briefly review results from two important institutional characteristics that have been claimed to be key in the existing literature; democracy and forms of government.

### 2.1.1 Democracy

A long standing controversy is if democracy promotes economic growth. Barro (1996) investigates how growth rates are affected by democracy, and finds that controlling for other explanatory variables such as education, rule of law, and investment (p. 23) “the overall effect of democracy on growth is weakly negative.” There are, however, several issues with the analysis of Barro (1996), in addition to the analysis having the well-known challenges of standard cross country regressions. In particular, one could argue that democracy stimulates growth exactly by promoting education, rule of law, and investment. Thus it is not obvious that controlling for these when investigating the effects of democracy is the best way to proceed. Tavares and Waciarg (2001) aims at investigating this issue further, arguing that (p. 1342) “In theory, if a comprehensive institution such as democracy matters, it should matter indirectly through its effect on variables that in turn determine economic growth.” They proceed aiming to identify the channels by which democracy affects growth, finding that it increases growth through the accumulation of human capital and, to some extent, by lowering income inequality, while it decreases growth by lowering the rate of physical capital accumulation.

Rigobon and Rodrik (2005) compare democracy and rule of law, and find that the rule of law is more important to explain income differences than democracy, but that both have a positive effect on income. Gerring, Bond, Barndt and Morene (2005) review the literature on democracy and growth, and conclude that democracy has a small negative or zero effect on growth. This literature is challenged by Acemoglu, Naidu, Restrepo and Robinson (2015), who point out many weaknesses with previous literature, and then develops an IV-strategy by instrumenting for democratization with countries in the same region democratizing. They find that democratization increases GDP per capita by 20% in the 25 years after democratization. Moreover, they investigate the mechanisms, finding support for democracy increasing income through higher investment, economic reforms, increased provision of public goods, and by reduced social unrest. An interesting interaction is that democracy seems to be more growth enhancing the higher is the educational level of the population.

### **2.1.2 Form of government**

All countries in Latin America, and most countries in Africa, have presidential systems. Linz (1978) suggested that presidential democracies tended to be less stable and more prone to coups. If this assertion holds true, then, since a typical result in much literature is that political instability reduces growth, a likely implication is that presidentialism is an obstacle to growth. Persson, Roland and Tabellini (2000) argue that presidential systems will have lower levels of taxation, less public spending, and less rents than parliamentary systems. Persson and Tabellini (2005) find empirical support for smaller governments in presidential countries, while there seem to be no robust empirical evidence that presidentialism is associated with less rents. Robinson and Torvik (2016) develop a theory of presidentialism and parliamentarism that contains the opposite result of Persson, Roland and Tabellini (1997, 2000), in that presidentialism is associated with worse policy outcomes; less of the public income is used to provide public goods, and more is transferred to the political elite. The reason for this difference, is that in Robinson and Torvik (2016) presidentialism is not about strengthening checks and balances as in Persson, Roland and Tabellini (1997, 2000), but is rather a vehicle to monopolize economic and political power. Thus the economic outcome becomes less efficient. One way to view these results is that presidentialism works better when other institutions are strong in the first place, while in many countries in Latin America, Africa and Asia, presidentialism concentrates power rather than spreads it. Thus presidentialism may be particularly damaging to growth in weakly institutionalized countries.

Another main difference in electoral systems is between proportional representation systems and majoritarian systems. Again Persson, Roland and Tabellini (1997, 2000) have been influential, developing theories where proportional representation systems have larger governments and more redistribution than majoritarian systems, a prediction that receives empirical support in Persson and Tabellini (2005). There may also be a tendency for more pork-barrel projects in majoritarian regimes. One assertion is that the size of government is smaller in majoritarian systems, and that policy is less efficient. The implications for growth, however, are unclear.

A problematic feature with the literature investigating if specific dimensions of institutions matter is that if it is a cluster of institutions that is the important, then the literature runs in danger of estimating highly biased estimates. Assume, for instance, a simplified example where two types of institutional characteristics mattered, say democracy and the

independence of the legal system. Assume that to have democracy we need some independence of the legal system, and to have independence of the legal system we need to have some democracy. Then two alternative studies that instrument democracy and independence of the legal system with the same instrument would both conclude that the institutional characteristic they focused on where highly important, although in reality is was the cluster of the two that was. To make progress on this, we would need separate instruments for democracy and for the independence of the legal system. For more on the empirical challenges when it is clusters of institutions that are crucial, see Acemoglu (2005).

Unfortunately, few studies allow for “horse races” between different institutions. An exception is Acemoglu and Johnson (2005), who compare institutions of private property rights with institutions that regulate interactions between private actors. The first type of institutions is hypothesized to be dependent on settler mortality and population density in countries being colonized as in Acemoglu, Johnson and Robinson (2001,2002), while the second is related to the type of the legal system and thus hypothesized to depend on the identity of the colonizing country as in La Porta, Schleifer and Vishny (1998). Thus one can establish one instrument for each type of institution. The conclusion is that of the two types of institutions, the only relevant institutions for growth are those related to property rights.

A critique of the macro data used in analysis of institutions and growth is presented by Pande and Udry (2005), who find that (p. 6) “The instruments that dominate the literature are based on geography and colonial and precolonial history. These variables exploit long term persistent institutional features of a country. The IV strategy purges the estimates of the effect of any institution that change on the path of development, because these are clearly endogenous to the growth process. This, however, implies that the IV strategy by design is not able to identify the consequences of institutional change for growth.” Pande and Udry (2005) also have a number of other critiques of the literature, and argue that an empirical strategy that relies more on micro-data and within country variation is the best way to proceed.

A main challenge in the literature is that, to date, we have limited knowledge on which particular institutions that are the most important ones in the cluster of institutions that affect growth. Or even more challenging; is it at all a fruitful research avenue aiming to single out which part of the institutional cluster that is the most important?

Moreover, it is not only that different parts of institutions interact, institutions also interact with other variables. A main such interaction is with the resource endowments of a country. A huge literature has emerged under the label “the resource curse”, initially arguing that richness in natural resources is a curse, and later focusing on that it is the interaction of natural resources and institutions that may produce low growth (as well as other bad economic and political outcomes). This literature has particular relevance for developing countries not only because many of these are resource abundant and have weak institutions, but also because the results from this literature have implications for the effects of foreign aid, which may sometimes be seen as a close analogy to foreign exchange received from the sale of natural resources. Thus, in the next subsections we review this literature in some detail, starting with the initial literature and then turning attention to more recent contributions that focus on the interaction of natural resources and institutions.

## 2.2 The Resource Curse

In the 1950s, and onwards, a conventional wisdom was that countries specializing in resource exports would be growth losers. Due to elasticity pessimism and technology optimism, the price of natural resources would fall relative to those of industrial goods. Engel effects meant that demand for natural resources would not keep up with income, low price elasticities would lead increased supply to depress prices, and technological development would ensure products that relied less on raw materials. Paradoxically, today some economists argue that specialization in resource exports may be unattractive for exactly the opposite reason: it is so profitable that it may in fact turn into a curse.

Initial theory models by van Wijnbergen (1984) and Krugman (1987), and initial case studies by Gelb (1988) and Karl (1997), showed that petroleum resources could have negative economic as well as political effects. What kicked off a huge interest in the topic, however, was the claim by Sachs and Warner (1995) that this were not only isolated examples, but in fact a pattern that can be generalized: resource abundance is bad for economic growth.

The initial empirical literature starting with Sachs and Warner (1995) can be divided into two parts. The first part of the literature finds that resources are bad for outcomes such as growth, democracy and violent conflict. The second part of the literature finds that there is no such connection, or even that resources are good for such outcomes. Unfortunately, both strands of the literature use measures of resource abundance that are likely to drive their conclusions.

### 2.2.1 Measures of resource abundance

The seminal cross country study on the resource curse by Sachs and Warner (1995) measures resource abundance by natural resource exports as a share of GDP, and find a negative correlation between resource abundance and growth rates in the period 1965-1990. In their study they also control for variables like initial income level, openness of the economy, institutional quality, education etc. Their measure of resource abundance is likely to overestimate the negative influence of natural resources on growth. An often used argument for this, however, is an unconvincing one: since resources are measured as a share of GDP, rich countries will other things equal be measured as resource poor, while poor countries will be measured as resource rich. Although this is correct when the measure is viewed in isolation, the studies which use this measure in growth regressions control for initial GDP. Thus this potential problem is, at least to some degree, dealt with.

Nevertheless, the cross-country regressions are likely to contain biases due to omitted variables. Consider two hypothetical societies. Assume that the culture, the institutions, or something else we do not really know what is, makes the incentives for undertaking production better in one of the societies than in the other. In the "good" society the incentive to undertake production relative to extract natural resources is then high. In the "bad" society, on the other hand, the incentive to extract natural resources relative to undertaking production is high. If the initial income is the same, the "bad" society will derive more income from extraction of natural resources than the "good" society. It is also likely that the "good" society will have higher growth than the "bad" one. But the lower growth in the "bad" society is not due to a high natural resource intensity in income. Neither is the high natural resource

intensity in income due to low growth. It is the factor we cannot fully account for that explains both.

Other influential papers that argue for a resource curse, but use different measures, may also overestimate the negative influences of resource abundance. Gylfason (2001) use a stock measure, rather than a flow measure, of resource abundance. He calculates natural capital as a share of a country's total capital, and finds a negative correlation between this measure and variables such as growth, level of GNP, and educational variables. Again, these correlations are interesting, but must be interpreted with caution. In particular, since human capital makes up large parts of a country's total capital, and human capital in turn is calculated as a present value of wages, countries with a high wage level will be measured as resource poor.

Brunnschweiler and Bulte (2008) criticize the use of flow measures such as the ratio of natural resource exports to GDP. In their view such variables more likely measure resource dependence, and not resource abundance. They argue that a better measure of resource abundance would reflect resource stocks, but unlike Gylfason (2001) they do not use resource stocks as a fraction of total capital. Using resource stocks, they find no evidence of a resource curse. Rather, they find that resource abundance positively affects both growth and institutional quality. Their data and method have been challenged by van der Ploeg and Poelhekke (2010), however, who point out that the stock measures used by Brunnschweiler and Bulte (2008) have been derived from flow measures.

In a similar spirit to Brunnschweiler and Bulte (2008), Alexeev and Conrad (2009) argue that the findings of a resource curse (p. 598) "are due mostly to misinterpretation of the available data". Alexeev and Conrad (2009) use variables such as hydrocarbon deposits per capita and value of oil output per capita. They conclude that that (p. 592) "high endowments of oil and other minerals have a positive impact on per capita GDP ", and that "natural resource endowments positively affect long term growth rates of countries."

Using oil reserves, or oil production, as a measure of resource abundance, however, is likely to introduce biases that portray oil as having more favourable effects than what is the reality. Well-functioning countries which have long been industrialized may have discovered more of their subsoil assets, leading such successful countries to be measured as resource abundant. For instance, Collier (2010) compares the value of known subsoil assets per square kilometre in countries with high GDP to those with low GDP. In the former the value of known subsoil assets is four times the value in the latter. It is reasonable to assert that at least part of this difference is due to more of the existing reserves being discovered in successful than in unsuccessful countries. Cust and Harding (2015), using a regression discontinuity design, find that at national borders exploration companies drill on the side with the best institutions two times out of three. Thus the studies that use (known) resource wealth or resource production as a measure of resource abundance, are likely to overestimate eventual positive effects of natural resource abundance.

### **2.2.2 GDP growth and GDP level**

Obviously, in the long run the countries with high GDP growth rates will be equivalent to those with a high level of GDP. Still, these two measures of economic success are not equivalent. The initial literature arguing for a resource curse, used growth rates over a period

of a few recent decades, controlling for initial income. Alexeev and Conrad (2009) argue that this may bias the results in favour of a resource curse because (p. 586) “it is possible that a large oil endowment results in high growth rates in the early stages of extraction and slower rates when oil deposits mature.” In this way slow growth in mature oil economies may be a natural, and even an optimal, response. Alexeev and Conrad (2009) argue that using GDP levels is preferable.

A common problem with the GDP measures – be they growth rates or levels – is a flaw in calculating GDP for countries that extract non-renewable resources. When oil is extracted and sold this is calculated as income. It is not. To see the logic, consider another type of public wealth; say the government owns some financial assets which it then sells off and buys some other assets. The sales of these financial assets are not to be considered income in GDP. The government has, simply, changed its allocation of wealth. In the same way the sale of a barrel of oil is not income. It is exchanging natural resource wealth for another type of wealth. But in the GDP accounts selling off oil wealth is calculated as income. The GDP numbers of oil economies are, therefore, inflated. Using GDP levels to argue that oil is favourable, therefore may picture oil economies as rosier than what they are. (For GDP growth rates the bias may go both ways).

It is likely that the effect of natural resources has changed over time. In the countries with strong institutions, which industrialized first, natural resources contributed to this industrialization. In the countries with weak institutions, that did not industrialize, natural resources may have been exploited later and had a different impact, as we discuss below. Using GDP levels hides the historical heterogeneity, averaging those who did well and those who did badly.

## 2.3 Institutions and the Resource Curse

Sachs and Warner (1995) resorted to a Dutch disease explanation for their finding of a resource curse. In their understanding, spending of resource income crowds out activities that generate learning and growth. Investigating if the curse operates through institutions (which they measure with bureaucratic efficiency), they ask if institutions are endogenous to resources. They do not find that resources influence institutions, and conclude that the curse (p. 19) “does **not** appear to work through the bureaucracy effect” (bold in original). But as argued by Mehlum, Moene and Torvik (2006), even if institutions are not endogenous to resources, the resource curse may operate through institutions. Resource abundance may simply have different effects depending on the initial institutions in place. Indeed, this is what Mehlum, Moene and Torvik (2006) find. When institutions are grabber friendly, that is they provide weak protection of property rights, have ill-functioning legal systems, and are not able to control corruption, then resource abundance correlates with lower growth. In contrast, when institutions are producer friendly, resource abundance correlates with higher growth. Countries with quality of institutions in the top 20 percent, escape the resource curse.

Boschini, Petterson and Roine (2007) use instruments for institutional quality, and find similar results, while Collier and Goderis (2012) confirm similar results with panel data. These findings do not imply that the Dutch disease literature is irrelevant. But overspending and Dutch disease are more likely an outcome of the resource curse than a cause. As

emphasized by Robinson and Torvik (2005) and Robinson, Torvik and Verdier (2006, 2014), when institutions invite patronage to secure political support, countries are especially prone to overspending, bad quality investments, and low growth. Matsen, Natvik and Torvik (2016) develop a theory to explain why voters may, even when they are fully rational, reward politicians with stronger political support when they choose a less efficient oil extraction path.

Andersen and Aslaksen (2008) find that resources lower growth in presidential democracies, but not in parliamentary democracies. A likely explanation for this is that, with the exception of the US presidential system, most presidential systems concentrate much power in the hands of the president. This makes institutions in such countries less inclusive than in those with parliamentary institutions, where the prime minister depends on the continuous support of the legislature.

Bulte and Damania (2008) find that resource abundance is more likely to cause negative outcomes in autocracies than in democracies. Arezki and Bruckner (2012) find that increased export prices lead to a reduction of external debt in democracies, but not in autocracies. Cabrales and Hauk (2010) develop a political economy model where resource abundance crowd in human capital accumulation when institutions are good, but crowds it out when they are bad, and find empirical support for such an effect. Boschini, Petterson and Roine (2007) find that lootable resources, in combination with weak institutions, have the worst growth effects. A combination of diamonds and grabber friendly institutions puts you at the bottom of the list. van der Ploeg and Poelhekke (2009) argue that the resource curse is less pronounced in countries with well-developed financial institutions. Arezki, Hamilton and Kazimov (2011) conclude that negative effects (p. 14) “of resource windfalls on macroeconomic stability and economic growth are moderated by the quality of political institutions.”

Robinson and Torvik (2013) develop a simple theory of the conditional resource curse, showing how the comparative statics of the equilibrium depend on institutions. With strong checks and balances, a resource discovery increases income by more than the value of the discovery. The reason is that the resources crowd in other productive activity. With checks and balances absent, on the other hand, a resource discovery decreases total income. The reason is that, in such a case, resources crowd in destructive activity. In turn this makes productive activity even less profitable, crowding in destructive activity further. With weak institutions a resource discovery has a multiplier effect. But the bad news is that the multiplier is negative.

The resource curse literature has been too occupied with studying the average effect of resource abundance. The more interesting question is why oil induces prosperity in some places but poverty in others. Recent literature has identified several dimensions in which the countries where resources have contributed to prosperity differ from the countries where resources have contributed to poverty. This literature suggests that the key differences arise due to differences in political and private incentives. These differences, in turn, can be traced back to differences in institutions. For a review of the literature on institutions and the conditional resource curse, see Torvik (2009).

Institutions may also themselves be endogenous to resource abundance. They are equilibrium outcomes. Historically, there is little doubt that resource endowments, be they represented by the availability of slaves, silver and gold, or arable land, has been

fundamental in shaping institutions. But the impact of resource abundance on institutions seems not only to be of historical interest. Why did voters in Venezuela allow President Hugo Chávez to monopolize power by dismantling checks and balances? Why did dictators in Egypt and Tunisia leave power when the demand for democracy increased, while in Saudi Arabia and Bahrain they did not? Why did the civil war end in Mozambique when resources dried up after the cold war, while in Angola, where UNITA controlled diamonds and MPLA oil, it went on for another ten years? It is hard to argue that the answers to these questions are unrelated to natural resources. But they are not *only* related to natural resources, they are also related to initial institutions.

Institutional quality is, in several dimensions, the common denominator in the literature on the conditional resource curse. Much of the empirical literature to date, however, concentrates on correlations. As with the cross-country literature that focus the average effect of resource abundance discussed above, this raises obvious concerns related to omitted variables and endogenous measures of resource abundance.

To date, a main problem with the resource curse literature is that no one has been able to come up with a truly exogenous cross country measure of resource abundance. Another shortcoming of the literature is, as we return to below, its normative implications: what does it imply for the design of policy and of institutions?

### 3. Endogenous institutions: positive approaches

So far, institutions have been seen as exogenous features of the economy. If institutions are decisive for growth, either by themselves or interacted with other country characteristics, the obvious next question is what determines institutions?

This is what we deal with in the remainder of the paper, and we discuss positive as well as normative approaches to endogenous institutions. Moreover, the normative design of institutions discusses both how this design should depend on initial institutions, and also which type of institutional designs that may constitute a political equilibrium.

Institutions allocate power. Those with economic and political power have the opportunity, and the incentives, to choose institutions that preserve their power. Therefore, institutions tend to reproduce. This implies that institutions are shaped by history, and, through this channel, by variables such as natural resource endowments. But at the same time it also means that institutions may change when, for instance, resource endowments, or their value, change. The discovery of new natural resources, or a price increase that makes existing resources more valuable, may demand new types of institutions to utilize the new opportunities.

North (1991, p. 97) points out that institutions “evolve incrementally, connecting the past with the present and the future; history in consequence is largely a story of institutional evolution in which the historical performance of economies can only be understood as a part of a sequential story. Institutions provide the incentive structure of an economy; as that structure evolves, it shapes the direction of economic change towards growth, stagnation, or decline.”

We start off by discussing several dimensions of the broad question of positive institutional development, before in the next section we turn to the normative question of how institutions and institutional reform should be designed.

#### 3.1. Does growth produce democratic institutions?

A key policy question is if one should insist on developing countries being democratic. Most social scientists would probably subscribe to the view that democratic values are, by themselves and by the rights they imply, of first order importance for the wellbeing of citizens. However, an alternative view may hold that for developing countries, democracy may follow growth and that for this reason if one succeeds in getting growth going a byproduct of that will be democratization. A possible consequence of such a view is that for developing countries it is more important to achieve growth than democracy. However, to be able to discuss this normative question one must first clarify if it is the case that economic growth produces democratic institutions.

The view that economic growth causes democracy is most famously associated with the modernization hypothesis of Lipset (1959). It is a well-documented fact that income and democracy are strongly correlated, and many authors, such as e.g. Barro (1999), interpret this relationship as causal, running from income to democracy. Barro (1999) also finds that if democracy happens to arrive at low levels of development, then it is unstable. The causal interpretation of the literature is challenged by Acemoglu, Johnson, Robinson and Yared

(2008), who argue that the previous literature is troubled by reverse causality in that democracy may produce high income, and especially by omitted variable bias in that there are common factors not controlled for that explain both high growth and presence of democracy. They show that with country fixed effects, and also with instruments for income, there is no causal effect of income on democracy. Their interpretation is that economic and political development is interwoven, in that some countries went along a path of dictatorship, repression and low growth, while others went along a path of democracy and economic growth. This view is broadly consistent with the main thesis in Besley and Persson (2011) that development typically clusters, which we return to below.

Cervellati, Jung, Sunde and Vischer (2014) revisit the study of Acemoglu, Johnson, Robinson and Yared (2008), and find that in fact there are important and significant heterogeneous effects of income on democracy. In particular, among former colonies higher income retards democracy while in non-colonies it promotes it. This is a very important extension for many developing countries, showing that a view where they can let income come first and democracy later is even less relevant than what the results in Acemoglu, Johnson, Robinson and Yared (2008) suggests.

In the modernization theory causality runs from income to democracy. A large body of recent research argues that the causality mainly runs in the opposite direction. It is the presence of inclusive institutions that produces growth, and the presence of extractive institutions that retards it. In turn, a main variable explaining the evolution of extractive versus inclusive institutions are the interplay between resource endowments and initial political power. In these theories, which we review next, the causality can be seen as running from resource endowments to institutions, and then to growth.

### **3.2 The evolution of inclusive and extractive institutions**

Several influential papers, and in particular Sokoloff and Engerman (2000) and Acemoglu, Johnson and Robinson (2001), argue that resource endowments have historically been decisive for the emergence and persistence of institutions. Sokoloff and Engerman (2000) discuss colonization of the New World of North and South America, where initially (p. 217) “most knowledgeable observers regarded the North American mainland to be of relatively marginal economic interest, when compared with the extraordinary opportunities available in the Caribbean and Latin America.” Factor endowments were far more lucrative in the latter, resulting in specialized production of sugar and other highly valued crops with the help of slave labor. Income per capita (including slaves) was higher than in the North. However, the lucrative factor endowments and resulting large scale specialization also meant the establishment of societies with a very unequal distribution of wealth and political power. In turn this (p. 221) “contributed to the evolution of institutions that protected the privileges of the elites and restricted opportunities for the broad mass of the population to participate fully in the commercial economy even after the abolition of slavery.” In contrast, the economies in the North (p. 223) “where not endowed with substantial populations of natives able to provide labor, nor with climate and soils that gave them a comparative advantage in the production of crops characterized by major economies of using slave labor.” The result was that in the North, production was based on laborers more homogenous in terms of human capital and wealth. Because of the limited economies of scale, they operated as independent proprietors. Thus economic and political power was less monopolized, in turn opening up for

the development of institutions that, in the terms of Acemoglu and Robinson (2012), were more inclusive.

Acemoglu, Johnson and Robinson (2001), one of the most influential papers in economics over the last decades, investigate different colonization strategies, how they depend on factor allocations and disease environment, and how they shape institutions. Some societies, in particular those where conditions for European settlements are unfavourable, invites a colonial hit and exploit strategy. To grab resources, existing institutions must be dismantled, and replaced by extractive institutions. The more resources there are to be grabbed, the higher the profitability of extractive institutions. In other societies, where the conditions for European settlement are more favourable, institutions that protect the property rights of those that settle are installed. When settlement is attractive, resources do not invite institutions that favour predatory behaviour. If anything, resources here can be argued to crowd in institutions that secure investment, entrepreneurship and growth.<sup>1</sup>

As shown by Acemoglu, Johnson and Robinson (2005) colonization did not only affect institutions in the colonized countries differently, it also had different impacts on institutions in the colonizing powers. The resources in the New World gave increased possibilities for trade. In Portugal and Spain there were few checks on the monarchy and thus (p. 551) “it was the monarchy and groups allied with it that were the main beneficiaries of the early profits from Atlantic trade and plunder, and groups favouring changes in political institutions did not become powerful enough to induce them.” This view is in line with North and Thomas (1973), who point out that the incomes from silver and gold from the American colonies freed the Spanish monarchy from the constraints of the parliament. Atlantic trade made institutions less inclusive. In the Netherlands and Britain, on the other hand, there were more checks on royal power, and “the rise in Atlantic trade enriched and strengthened commercial interests outside the royal circle and enabled them to demand and obtain the institutional changes necessary for economic growth.” (Acemoglu, Johnson and Robinson (2005), p. 550). In particular (p. 550) “Checks on royal power and prerogatives emerged only when groups that favoured them, that is commercial interests outside the royal circle, became sufficiently powerful politically.” In the Netherlands and Britain, therefore, the number and political strength of private entrepreneurs grew, in turn demanding institutions where the monarchy was weakened and opportunities for private businesses improved. Institutions in Spain and Portugal diverged from those in the Netherlands and Britain. The different political development, in turn, contributed to divergence in economic outcomes.

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<sup>1</sup> Nunn (2008) and Dell (2012) also document long run effects on outcomes from historically determined institutions. Dell (2012) finds, for instance, that inside mitas districts (districts with forced labor) household consumption is 25 percent lower and the increase in stunting in children is about six percentage points. An alternative view to the institutions hypotheses of Sokoloff and Engerman (2000) and Acemoglu, Johnson and Robinson (2001) is advanced by Allen, Murphy and Schneider (2012), who argue that the initial income differences between North America and Latin America was in fact not as substantial, and that (p. 829) “two streams of migrations in the colonial period – one emanating from North-Western Europe at high wages and the other from Iberia at lower wages – created an early difference in income levels in British and Spanish America. These initial differences were compounded by differences in human capital accumulation and differences in the incentives to mechanize production, which accelerated divergence after independence. Thus, these initial wage differences led to the Great Divergence in the Americas.” Williamson (2009) is skeptical to the statement that Latin America has always been unequal compared to others, and on the basis of this questions the theories that argue that the initial inequality in Latin America is to blame for the disappointing development.

### 3.3 Endogenous institutions and the resource curse

Examples of how resource abundance may shape institutions more recently are given in Ross (2001a). Ross shows that in several South-East-Asian countries timber booms had the result that politicians, by purpose, demolished institutions. The timber gave politicians a way to earn big money – but to do so they had to dismantle the institutions that were set up to protect the forests. Rather than institution building, politicians were incentivized to engage in institution destruction. Resource abundance makes it more attractive for politicians to have fewer checks on their power, and if there are weak checks on their power in the first place, then such a further weakening is feasible.

It is, maybe, not surprising that political leaders find it attractive with fewer checks and balances when natural resources are plentiful. Indeed, the conventional wisdom in literature such as e.g. Persson, Roland and Tabellini (2000) is that when there are few checks and balances, then politicians are able to grab more rents. In this way checks and balances are bad for politicians, but good for the citizens. According to the standard paradigm, therefore, voters should be highly in favour of checks and balances in the political system. As pointed out by Acemoglu, Robinson and Torvik (2013), however, voters in several resource abundant Latin American countries have willingly, sometimes enthusiastically, removed checks and balances on their presidents. In Venezuela, shortly after his election in 1998, President Hugo Chávez rewrote the constitution, and in 1999 72 percent of the people who voted supported his move to a unicameral legislature, reallocating powers to himself. Later, several additional changes, for instance the removal of term limits, weakened checks and balances further, again with the approval of voters. Similarly, after winning the 2006 election in Ecuador, President Rafael Correa rewrote the constitution moving to a unicameral legislature and increasing his powers, taking control of monetary policy back from the central bank, and gaining the power to suspend the legislature. In 2008, 64 percent of voters supported the new constitution. In 2009, 61 percent of Bolivian voters similarly supported a new constitution significantly increasing Evo Morales's powers.

These examples show that the most widely used paradigm for understanding checks and balances is, by itself, insufficient to understand why voters would dismantle such checks and balances, since it would suggest that voters should prefer maximal checks on presidents. Acemoglu, Robinson and Torvik (2013) develop a theory to explain why, in particular in countries with vast natural resources, high income inequality, and/or a rich elite that may influence policy through non-electoral means such as bribing and lobbying, poor voters may find it in their own interest to dismantle checks and balances. Political rents are lower with checks and balances. But this is a double-edged sword, because this also means that politicians are cheaper to bribe. In turn, the rich elite can then buy politicians to get a policy more in their preferred direction, in particular a policy with less income distribution. This is more costly to the poor, the more there is to gain from income redistribution. Thus when income inequality is high, and the state receives much income from natural resources, poor voters may prefer to dismantle checks and balances. By doing so, they realize that they increase the powers of the President, allowing him to grab more rents, but at the same time they insulate him from the influences of the rich. By making President Hugo Chávez strong, they made the rich elite weak.

### 3.4 Democracy and the resource curse

We have already seen that with resource abundance, political elites may find it particularly attractive to monopolize economic and political power. A possible way to achieve this is to avoid democracy. Resource income not only gives the incentive to prevent, or delay, a transition to democracy. It also gives the means. The means, in turn, can be a combination of sticks and carrots. The Arab Spring is a particularly interesting recent example. After December 2010 the demand for democracy increased in all countries in the region, but the political outcomes were very different. In oil-poor Egypt and Tunisia the previous dictators quickly gave in to protests, leaving power. In oil-rich Libya, by contrast, Gaddafi decided to use his oil-fueled military machine to fend off the demand for democracy. Had it not been for foreign intervention, he would most likely have succeeded. In Saudi Arabia, the political elite responded in yet a different way, with the King announcing major increases in income transfers to citizens. It seems, at least so far, he succeeded to pay his way out of democracy.<sup>2</sup> Although the Arab Spring illustrates that political elites have different means to fight democracy, and that the strategy and success may depend on oil abundance, a remaining question is if, in general, oil retards democracy. Empirical literature suggests it may.

Ross (2001b) finds that countries rich in oil are, on average, less democratic than other countries, also controlling for income, geography, religion and so on. Three channels through which this may arise are discussed. The first is through what is termed the rentier effect; oil income can be used to buy off demands for accountability and provide patronage in exchange for political support. It relies on carrots. The second relies on sticks, and is termed the repression effect. Ross notes that in resource-rich states (p. 335) “resource wealth may allow the government to spend more on internal security and so block the population’s democratic aspirations.” The third, termed the modernization effect, states that if resource-based growth implies an economy with less education and fewer high-skill occupations, then the social forces that demand democracy will be weakened.

Haber and Menaldo (2011) rightly criticize the literature for being plagued with omitted variables and reverse causality, and ask (p. 3) “Do natural resources fuel authoritarianism, or is it the other way around? Might it be the case that the only economic sectors that yield rates of return high enough to compensate for expropriation risk in authoritarian states are oil, gas, and minerals, thereby engendering resource reliance?” Developing panel data that follow countries over long periods of time, they observe countries prior to becoming resource reliant, and include country fixed effects. They conclude that (p. 25) “Our results indicate that oil and mineral reliance does not promote dictatorship over the long run. If anything, the opposite is true.” It should be noted, however, that this conclusion is not as robust as it may seem. When a country becomes more democratic it normally becomes more transparent. Increased transparency, in turn, means that data on oil wealth and revenues that were previously hidden becomes more publicly available. Thus, in a regression with country-fixed effects, a positive correlation between democracy and the proceeds from the oil sector does not imply that oil is good for democracy. It may be that measured oil income or oil wealth increases as a result of countries becoming more democratic. Aslaksen (2010) finds, also

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<sup>2</sup> Hodler (2012) develops a model to explain the variations in political strategies across the Arab World in response to the Arab Spring.

using a panel data set with country-fixed effect, results in some contrast to Haber and Menaldo (2011).<sup>3</sup>

Tsui (2009) argues that the timing and size of oil discoveries are more exogenous than oil production or exports, and find (p. 90) “that larger oil discoveries are causally linked to slower transitions to democracy.” Interestingly, Tsui (p. 90) also finds that “oil discovery has almost no effect for democratic countries.” This supports an assertion that it is particularly when institutions are non-representative in the first place, that resource abundance may endogenously push them into becoming even less representative. Dunning (2008) discusses several ways in which the effect from resource abundance on democracy is conditional.

A related empirical literature investigates if politicians in resource abundant countries succeed in using their resource wealth to secure political support and hold on to their power. According to the leader in *The Economist* September 29<sup>th</sup> 2012, “Had it not been for the oil boom, Mr Chávez would surely have long since become a footnote in Venezuelan history.” Although less vocal, the scientific literature on the topic, for instance Andersen and Aslaksen (2013), do find that political leaders in oil rich countries stay longer in office. Monteiro and Ferraz (2010) find the same for municipalities with oil windfalls in Brazil. Matsen, Natvik and Torvik (2016) develop a theory model of petro populism.

### 3.5 Installing weak property rights

Another institutional evolution that seems, unfortunately, to have gained increased importance in developing and transition countries over the last decades is politicians who find it in their own interest to introduce weak property rights. It might at first sight seem counterintuitive that politicians may find it in their own interest to weaken property rights, since they in many countries have huge economic resources in the first place, and thus should have an interest in secure property rights. But this view, of course, stops short of asking why the politicians became so economically powerful in the first place. Sonin (2013) develops a theory of inequality and the institutional dynamics following transition, motivated by the experience in Russia where “The oligarchs` success at rent-seeking led them to prefer relatively weak protection of property rights and forced other economic agents to invest in private protection from expropriation. Due to the oligarchs` political power, the Russian state has failed to establish and to enforce a system of clearly defined property rights.” Thus, given that some narrow but powerful groups have been able to capture the political and economic system, they may have a strong incentive to make sure institutions are not made more inclusive, as this erodes their economic and political power.

The development of Zimbabwe after independence in 1980 provides another example of the political attractiveness of weak property rights. After monopolizing power and rewarding allies with political patronage, the economy in the 1990s deteriorated at a rapid pace. As a result, receiving patronage became even more important, and at some point the only economic resources left to hand over was those grabbed from others. To do so, the protection of private property was actively dismantled with the help of the state. This was an effective strategy to maintain political support in spite of an economy going down the drain. The handing out of patronage in the form of grabbing the assets of others necessitated the dismantling of effective private property rights. In turn, the dismantling of property rights

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<sup>3</sup> Andersen and Ross (2013) present a critique of the Haber and Menaldo (2011) paper.

meant that the only game left in town was to rely on political patronage. The Mugabe regime succeeded in making entrepreneurs dependent on the regime, rather than the regime dependent on the entrepreneurs. But how was the Mugabe regime able to monopolize political power in the first place?

### 3.6 Endogenous presidentialism

The evolution from parliamentarism to presidentialism in Africa shows a remarkable pattern (Robinson and Torvik, 2016). When African countries became independent parliamentary constitutions outnumbered presidential constitutions by 4 to 1. Thereafter, country after country switched from parliamentarism to presidentialism. Currently only three countries that started out with a parliamentary constitution remains with one; Botswana, Mauritius and South Africa. Interestingly, two out of these three, Botswana and Mauritius, are the most economically successful countries in Africa since independence. None of the countries that started out with a presidential constitution have replaced it with a parliamentary one.

The most influential theory comparing parliamentarism and presidentialism in economics is the work of Persson, Roland and Tabellini (1997, 2000) discussed above. Their theory is heavily inspired by the US presidential system, viewing presidentialism as a way of introducing strong checks and balances, and thereby preventing the political system transferring rents from the population towards the politicians. It seems, however, that such a view is not representative for presidential regimes in most other countries, be they in Latin America (in which all countries are presidential), in Eastern Europe and the former Soviet Union, or in Africa. Clearly, the desire of Joseph Mobutu to make himself president in 1967, rather than remain prime minister of Congo, represented a reduction in checks and balances. The same can be said for Robert Mugabe in Zimbabwe in 1987, Siaka Stevens in Sierra Leone in 1978, Hastings Banda in Malawi in 1966, or Kwame Nkrumah in Ghana in 1960. In these regimes, the introduction of presidentialism monopolized the political power around the president and his allies. And later changes to the regimes, such as the dismantling of term limits on the presidents, concentrated the power further.

A likely explanation for prime ministers to prefer a transformation to presidents, emphasized by Robinson and Torvik (2016), is that it makes them politically stronger in that they do not need the continuous political support in the legislature as a prime minister does. This monopolization of power, in turn, makes them grab more rents and provide less public goods to the population. Presidents may be supported by their allies even if these realize that a president will make himself stronger versus them, since an advantage for the allies of the president is still the monopolization of political power within a narrower group. For presidents and their allies this is thus attractive, in particular when there are strong polarization between different groups. For the provision of public goods and economic growth, however, it is disastrous.

A number of institutional characteristics may persist, change or evolve in line with the interests of a narrow group, because those with the political power also have the power to decide institutional design. Interestingly, there is a strong correlation between different dimensions of institutions, and a recent literature studies such institutional clusters, and why they emerge.

### 3.7 Endogenous clustering of institutions

Besley and Persson (2011) document that different dimensions of institutional quality are highly correlated, and clustered with low levels of development and income. Countries which typically have weak fiscal capacity, also have weak legal institutions, unpeaceful resolution of conflicts, and low levels of income. Development failures in different dimensions go hand in hand. Besley and Persson (2011) develop models of such development clusters, where different dimensions of institutions are complements. For instance, a higher fiscal capacity make it more attractive to invest in legal capacity that increases income, since then there is more to tax. Higher legal capacity, in turn, which makes income higher, makes it more attractive to invest in fiscal capacity. The clustering of institutions is endogenous. Now consider an incumbent in a country where tax revenues will be narrowly spend to favour the group that happens to be in power. An incumbent in such a regime will have weak incentives to invest in legal and fiscal capacity, since if he loses power the system will turn against his own interests. If, on the other hand, the incumbent has power in a country where tax revenues are spend in a way that have common interests, then even if he loses power he will enjoy benefits of high fiscal and legal capacity. Such an incumbent will thus have an incentive to invest in institutions with better legal and fiscal capacity.

Besley and Persson (2011) can be thought of as a theory of state capacity, with state capacity a cluster of institutions in which the state has the monopoly of violence, the authority and the capacity to enforce laws and raise tax incomes, and the ability to provide public goods. State capacity can be seen as a necessary, although far from sufficient condition, for good institutions. Countries such as China, and even North Korea, can be argued to have high state capacity. But non-democratic societies lack the mechanisms by which the population ensures that the state capacity is used in a way that squares with the interests of the broad segments of the population. As observed by Acemoglu and Robinson (2016, p. 31) in the context of Rwanda, “If it suits the regime, this state capacity can be used to some extent to provide public goods and promote development. But as Rwandan history so vividly shows, it can also be used to repress and terrorize its people.”

According to the paradigm in Acemoglu and Robinson (2012) state capacity must be combined with political power broadly distributed in society if what one may think of as the cluster of inclusive political institutions is to emerge. Acemoglu and Robinson (2016, p. 2) further argue that state capacity and the broad distribution of political power are interrelated: “In fact, we claim, once one looks closer at how states are build and how power is spread there is a basin of attraction in which these two processes are highly complementary.”

Acemoglu, Robinson and Torvik (2016) show how state capacity may not be created exactly when it may be most needed. In a system where political power is held by the elite, creating a centralized state induces citizens of different backgrounds, interests, regions or ethnicities to coordinate their demands in the direction of general-interest public goods, rather than narrow issues just concerning themselves. This change in the political agenda that endogenously follows state centralization, as has been historically documented for instance in Tilly (1995) for the British case, implies that the creation of a central state induces citizens to find a common voice. This makes them stronger against those with political power, and in particular this political agenda effect is powerful when the gain in having general-interest public goods provided is high. Thus, from the view of those with political power, this may

exactly be the situation in which they will not find it in their interest to build a centralized state.

## 4. Endogenous institutions: normative approaches

Up until this point our discussion of endogenous institutions has mainly focused on how and why they may take the particular forms they do. In doing so, we have also touched upon normative issues, in that some particular characteristics of institutions have been seen to produce more favourable economic outcomes than others.

We now take the normative dimension one step further, and discuss more explicitly how institutions *should* be designed. We divide this discussion into two main parts. First, we discuss what we will term context dependent institutional design. That is, how should institutions be designed dependent on the initial economic and political equilibrium. Second, we discuss what we will term the political economy of institutional design. That is, how should institutional reform be designed to ensure that it is on the political equilibrium path?

### 4.1 Context dependent institutional design

Economists often implicitly, or even explicitly, recommend policy based on what standard economic theory suggests is first best, and moreover that this first best is independent of the initial political or economic equilibrium. One example of such a view on policy advice is what the Washington institutions for some time subscribed to, namely that a main, or maybe even the main policy challenge, was “getting prices right”. Introduce a market economy, and then prices will be right, and development follow. In this view there is also scope for institutional design, but the design of institutions has as its main emphasis to make sure market forces are allowed to operate. Most economists today would probably agree that this view is too simplistic, and that unfortunately there are more complicated and challenging forces at work which implies that “one size fits all” types of policy advice is not guaranteed to produce favourable outcomes. In the theory of institutions and growth we have discussed so far, institutions have much more important and fundamental roles than ensuring market prices to become right.

This raises the natural question of how institutions should be designed. Rodrik (2004, p. 2) finds that “the empirical literature on institutions and growth has pointed us in the right direction, but that much more needs to be done before it can be operationalized in any meaningful way. Many of the policy implications drawn from this literature are at best irrelevant and at worst misleading.” Although Rodrik does not explain in depth why such policy implications may be misleading, one interpretation is that different forces are at work when institutions are strong compared to when they are weak. It follows that the design of policy or of institutions have different outcome effects in different contexts. This raises the question of how policy and institutional designs should depend on the initial state of society. It seems that this is a main field of research where little has been done, and where it is important to gain additional knowledge.

In particular, Laffont (2006, p. 245-246) argues that “A given developing country is characterized by specific values of some crucial parameters such as the cost of public funds (which reflects the quality of the tax system), or the propensity to corruption (which reflects the lack of education, among other things), but also by the quality of institutions such as the quality of democracy, the quality of the judiciary, or the quality of auditing. Policy recommendations for such a country should be based on a model which incorporates all

these features. The work needed to obtain the mapping from the characteristics of the country to the policy recommendations is daunting, and probably beyond the capacity of the few researchers in this area.”

Laffont nevertheless undertakes a pioneering effort in starting to develop such a view to reform. He concludes, for instance, that (p. 242) “We have shown that the institution “separation of powers” which can be useful to mitigate the costs created by the opportunism of regulators, is even more valuable in developing countries. This is because these countries suffer from high costs of public funds (due to inefficient tax systems), from low transaction costs of collusion (due to poor auditing and monitoring), and from less efficient technologies. However, the implementation of this institution is more difficult and more costly for the same reasons, leaving us with an ambiguous result if the various weaknesses of these countries are not addressed simultaneously.”

Unfortunately, the normative design of policy and the institutions to undertake them has not progressed far since the contribution of Laffont. In this subsection of the paper we aim to shed light on one possible way forward by investigating how policy, and the institutions to undertake them, may be designed to combat the resource curse, and most importantly why the answer to this may depend on the quality of initial institutions. Arguably, this part of the paper (along with much of what will be discussed in the subsection on political economy of institutional design below) is more speculative than the others, in that a very simple, and maybe too simple, framework to investigate the issue is set out. This example is drawn from Torvik (2016), which discusses a very simple model of the establishment of a petroleum fund.

#### **4.1.1 Example: petroleum funds**

The setting up of a petroleum fund can contribute to the long term income potential from resources from oil and gas being reached, but it can also have the opposite effect. A key determinant is the initial institutions in place. Unfortunately, much policy advice seems to neglect this.

There are several reasons a petroleum fund may help alleviate challenges that follow from the abundance of oil and gas. A petroleum fund makes policy more rules based, and less the object of day to day political decisions. This has the potential to ensure a more long term perspective on policy. Such a long term view on the petroleum assets is important for several reasons. First, as what is often termed oil income is not really income in the conventional sense, but selling off one type of assets (non-renewable assets) and replacing them with another (dollars), a petroleum fund is wealth management. Continuously using the proceeds from the sale of petroleum for consumption is not like using regular income, it is running down the assets of a country. Second, consuming too much of the petroleum proceeds in the short run induces a structural shift away from traded and towards (public and private) non-traded sectors that is not sustainable. It has, at some point, to be reversed. The traded industries lost today have to be gained again in the future. Given that back and forth is not the same distance, such reversals are costly, and likely to induce considerable unemployment. Third, a petroleum fund may contribute to investment decisions being based on long term economic criteria, and not day to day political decisions. Investment decisions based on political criteria that involves clientelism, patronage, corruption and nepotism has

been identified as a main challenge in petroleum abundant countries. (Robinson, Torvik and Verdier, 2006). Fourth, a petroleum fund ensures the decoupling of resource spending and resource income. Oil prices and production levels are volatile, and a petroleum fund can transform volatile income streams into stable use of the proceeds from natural resource wealth. This has a stabilization effect on the economy, ensuring that the cycles in the resource sector are not magnified by the use of resource income, and also allows for the provision of public services to be more stable. In conclusion, there are many potential attractive properties by establishing a petroleum fund.

Several petroleum funds, such as the Alaska Permanent Fund and the Government Pension Fund Global in Norway, are widely seen as contributing positively to management of natural resource wealth. Many countries have drawn inspiration from these institutional designs of petroleum funds. Recently, there are additional important lessons to be drawn from the petroleum funds on the African continent. A challenge with setting up these funds has been that the initial institutions in place have often been weaker than when setting up funds in North America or Norway. On the one hand, one could argue that this makes the establishment of a petroleum fund more important, as the quality of political decisions on how to spend resource income may be worse, and thus the potential payoffs from establishing a new institution such as a petroleum fund are more important. On the other hand, one could argue that a weak initial institutional and democratic infrastructure makes the establishment of such a fund more risky, as the probability the fund is not managed and used as intended increases. Also, one could argue that the need for public investments is typically higher in African countries than in mature industrialized countries, meaning that the optimal trade-off between current and future spending is shifted towards the present. Then, a petroleum fund, which has as one of its main motivations to save resource income for the future, is less relevant.

Some of the initial experiences with petroleum funds in Africa are not favourable. One particular example is Chad, which assisted by the World Bank established a “future generations fund” where petroleum revenues were set aside. The fund was set up as part of an agreement with the World Bank which involved financing of the pipeline from Chad to the port in Cameroon. However, when political tensions erupted the fund was raided by the president and spent on the military, and as a response the World Bank aborted their relations with the regime. Another example is Angola, which established their petroleum fund in 2008. In 2013 the son of President Dos Santos became the head of its board. This questions if the petroleum fund is in reality setting up a new way to manage the resource wealth, as well as its independence from the current political elite holding power.

The setting up of a petroleum fund in the present, means that there are financial resources for the future. A challenge with such financial resources is that they are lootable. Thus if institutions are not sufficiently strong to prevent looting, these financial assets may invite rent-seeking, corruption, or grabbing. Thus more resources may be devoted to such activities, which has negative externalities on the rest of the economy. In addition, it may even be that politicians have incentives to undermine institutions further, if this is what it takes to be able use the petroleum fund in a way that is of the personal interest of the political elite. This has further negative externalities on the economy, which in turn may be even worse if investors today see that in the future, institutions that protect them, are even more tilted away from their interests. In this way, the future institutional and economic

equilibrium may be adversely affected by the establishment of a petroleum fund exactly when initial institutions are not sufficiently strong.

Consider an alternative to designing a petroleum fund with financial assets, namely to instead use the proceeds to invest in, for instance, human capital. Such capital is considerably less lootable than financial assets. In fact, to gain income from such capital politicians must develop tax systems and state capacity. Thus, if anything the incentives may be tilted in the direction of better, rather than worse, institutions. The negative externalities from predatory behaviour present under a petroleum fund may thus be turned on their head in the presence of a higher level of human capital. In addition, the payoff of such investments may be high exactly when the level of human capital is low in the first place.

What constitutes good institutional design, therefore, in this example setting up a petroleum fund or not, may heavily depend on the initial institutional equilibrium. Failing to take this into account may result in a policy advice where one takes as an assumption that what has worked well in some institutional settings also works well in others. This may have the implication that resource abundance, which works favourable in some institutional settings but not in others, makes resource abundant countries diverge even more. The same institutional design in these countries in fact works with opposite signs.

Glaeser and Schleifer (2003) has an ambitious theory of institutional design to secure property rights, where (p. 401) “In our theory, whatever law enforcement strategy the society chooses, private individuals will seek to subvert its workings to benefit themselves. The efficiency of alternative institutional arrangements depends in part on their vulnerability to such subversion. The theory leads to predictions as to what institutions are appropriate under what circumstances.”

In particular, in discussing the relevance for transition and developing economies they discuss the mapping from the cost of subverting justice – which they term  $X$  – to institutional design to be that (p. 420) “The first, and arguably most important, message of our model is that in situations of extremely low  $X$ , the optimal government policy is to do nothing. When the administrative capacity of the government is severely limited, and both its judges and regulators are vulnerable to pressure and corruption, it might be better to accept the existing market failures and externalities than to deal with them through either the administrative or judicial process. For if a country does attempt to correct market failures, justice will be subverted, and resources will be wasted on subversion without successfully controlling market failures.” Thus in this case, the best thing to do is simply give up. Another interpretation is that in such circumstances the important thing to focus on is to increase the cost of subversion before trying to combat the consequences of low costs of subversion.

Unfortunately, to date, too little knowledge is obtained on context dependent institutional design. It is thus to be hoped that this field will expand in the future, as it seems to be of huge importance to give advice on policy and institutional design exactly in countries where the initial equilibrium is unfavourable.

## 4.2 Political economy of institutional design

At one level one could argue that the normative implications from the theory of institutions and economic growth are, perhaps, obvious: implement the institutional designs that have shown to promote growth. This, however, does not bring us very far, partly for reasons discussed in the previous subsection on context dependent institutional design, but also for an additional main reason: even in cases where it may be clear how institutions should be designed, and how this design should depend on the initial state of institutions, those with the political power may have an interest that goes against changing institutions in this direction. Indeed, if it seems obvious which institutional changes that produce a better economic outcome for society, then why are these institutional changes not already undertaken? A likely answer to this is that those with political power see it in their interest to block such reforms. For example: democracy is better for society at large than dictatorship – but the same may not hold true for the dictator.

Even when all political power rests with the dictator, however, this argument does not fully explain why a change from dictatorship to democracy does not happen. If democracy produces a better outcome for society at large, then the winners of institutional reform can compensate the losers, and still be better off. In this way, institutions we observe are observed exactly because they are efficient. This view probably have few supports today, and for an obvious reason: promises of such future compensations are not credible. Those that stand to lose political power from institutional change will not be compensated in the future exactly because they lost political power. Thus they see it in their interest to block institutional reform, even if such reforms benefits society at large.

Already 20 years ago Rodrik (1996) discussed the political economy approach to policy reform and institutional design, and pointed out that (p. 25) “the normative implications of these models for policy and institutional design have to be worked out.” In this section we review the literature on the political economy of institutional design, and the question that concerns us throughout is: How should reform packages be designed to ensure that they are on the political equilibrium path?

Obviously, the answer to this question depends on the distribution of political power between groups in society, as well as the policy preferences of these groups. In the continuation we simplify and specify three groups that may have different political power and different preferences as regards institutional reform; politicians, citizens, and international organizations. Much of the differences between the different contributions in the literature (or the lack of such contributions), can be traced back to which of these groups have how much political power, and to differences in their preferences for reform.

### 4.2.1 Economics of transition: how to convince citizens to support reform

In the early 1990s, with the collapse of the Soviet Union and the transition from centrally planned to market economies in Eastern Europe, a debate of the political economy of reform emerged. A key topic in this debate was how a democracy might block or reverse reform, and what implications such political economy constraints might have for reform design. In this literature, politicians and international organizations were typically assumed to be interested in reform, while voters might have, for various reasons, incentives to block it. With

the starting point that politicians and the international organizations wanted reform, the remaining question was how to make citizens support it.

In one class of models the population at large has to support reform for it to be undertaken. In these models the political economy constraint is thus that the reform must be designed so that a majority of citizens supports it.

In Fernandez and Rodrik (1991) the voters may block reform due to uncertainty, even if the reform is welfare improving and voters are risk neutral. The intuition is that even if a majority of voters gain from reform, it is, *ex ante*, uncertain who these are. Thus, assume that there are two sectors of the economy, and that those in the state sector loses with reform but those in the private sector gains with reform. Ahead of reform 40 percent of the voters are in the private sector, while 60 percent are in the state sector. After the reform 40 percent will remain in the state sector, while 60 percent of the voters will be in the private sector. Let the gain per individual be the same in the private sector as the individual loss in the state sector. Thus, in this case a majority of individuals gain from reform, and since the individual gain for winners equals the individual gain for losers, reform is also welfare improving (since there are more winners than losers). Yet in this case reform will not be undertaken. Those 40 percent in the private sector support it, while those 60 percent in the state sector do not. The reason for the latter is that each of the state employees has a probability of  $1/3$  to be a winner of reform, but a probability of  $2/3$  of being a loser.

Should the reform be undertaken, however, it will not be reversed. After the reform, when uncertainty is revealed, 60 percent of voters gain, and will support it. This shows a rather general feature of institutional reform: it changes not only the economic, but also the political, equilibrium. That is what makes it so challenging to undertake. Those with political power today realize reform will change their equilibrium political power.

A normative implication from this approach is that revelation of individual uncertainty ahead of reform will make it politically feasible. If the majority gains from reform and the identities of the winners are known, then reform will have majority political support. Another possible solution is to promise that those that lose will be compensated. The obvious problem with this, however, is again that those who lose will be in the future minority, and thus promises that they will receive future compensation is not credible.

In Dewatripont and Roland (1992) the government can either adopt a one stage reform, or let the reform be imposed gradually. When the government can commit to future reforms, those that are the losers of a reform implemented tomorrow may support a reform today, to avoid being losers tomorrow. Thus the political equilibrium may be reform implementation if it is gradual, but no reform implementation if it is not gradual. In Dewatripont and Roland (1995) there is aggregate uncertainty as to what the effects of reforms are. In this case, they show that there are several arguments for gradual reform. In particular, when there is uncertainty and high reversal costs, then a big bang reform might be politically unfeasible. A gradual reform allows for the possibility of early reversal after some uncertainty has been revealed, and thus may attract a sufficient political support that it can be launched in the first place. Also, when there is strong complementarity of different elements of the reform package, this may in fact be an argument in favor of gradualism, as launching one part of the reform package may create future political support for another.

One possibility, stressed by Lau, Qian and Roland (2000) is to ensure that reform is Pareto-improving by designing a policy where the agents that has rents under the existing system maintain those under reform. In particular, they discuss the dual-track system of reforms in China, where (p. 122) “The introduction of the market track provides the opportunity for economic agents who participate in it to be better off, whereas the maintenance of the plan track provides implicit transfers to compensate potential losers from the market liberalization by protecting the status quo rents under the preexisting plan. Thus the dual approach is, by design, Pareto-improving.” A crucial element in such a policy-package is the commitment to stick to it. While this may have been possible to achieve at this time in China, it might in many case be difficult to enact. This is particularly so when those that stand in to lose if reforms are changed at a later stage overlap with those who lose political power as a result of the reforms.

It is interesting to note, as does Roland (2002, p. 42) that the experiences from countries in transition is that “The sequence of reforms in transition economies are roughly in line with political economy theory, which suggests that reforms expected to be more popular should start first. For example, in all of central and eastern Europe, democratic reforms preceeded economic reforms. Aspirations for democracy were very strong throughout the region, and support for economic reform was less strong than support for democracy.”

In many transition countries today, it seems, unfortunately, that we have moved from a situation where the population where thought to be sceptical to reform, to a situation in which it is the economic and powerful groups resist institutional change. In this sense, many of the obstacles for institutional reform in former communist countries is today that the transition ended with a concentration of economic and political power on the hands of the few, which in turn uses their political power to keep the status quo. This leads us to another part of the literature, which seems in many cases more relevant, but unfortunately also is more difficult to develop.

#### **4.2.2 Economics of preserving power: how to convince politicians to support reform**

The most tricky, but unfortunately most relevant situation, seems to be when citizens support reform, but politicians oppose it, and they have at the same time monopolized power to a sufficient extent that they can block it. This situation shows by itself that political power and efficiency cannot be studied as separate phenomena. And moreover, that since political power in many cases originate from economic power, arguments that efficiency can be studied separately from income and wealth distribution, are too narrow and may even lead to very bad policy advice. Acemoglu and Robinson (2013, p. 189) stress that “though much work still remains to be done in clarifying the linkages between economic policies and future political equilibria, our approach does not simply point out that any economic reform might adversely affect future political equilibria. Rather, building on basic political economy insights, it highlights that one should be particularly careful about the political impacts of economic reforms that change the distribution of income or rents in a society in a direction benefiting already powerful groups. In such cases, well intentioned economic policies might tilt the balance of political power even further in favor of dominant groups, creating significant adverse consequences for future political equilibria.”

Dixit (1997) also discusses the role of economists as advisors and argues (p. 225) that “The advice must be based on reasoning that includes the political process; it must use game theory and political analysis as well as conventional economic analysis.” Dixit uses the example of free trade and finds that (p. 228) “Good advice in this game will tell the politician how to manipulate the game in the ultimate interest of freer trade: “If we are to succeed, we must understand the motives and strategies of the other players in the game. Here is my judgement of how the various interests will line up and how they will try to counter our moves. To the extent that we can move first and quickly, here is my advice on how we should try to devise the rules of the game – set the agenda or the procedures – to deflect or defeat or hijack their strategies.””

Although these authors pinpoint a main challenge with institutional reform, remaining questions about how to undertake institutional reform when it is welfare improving, but those with political power resist it, is an area which is very thin in research. The question of how we in such cases design institutional reform in general, and democratization in particular, should be an area where researchers put in main efforts. As research stands today, we recognize the challenge, but are embarrassingly short on answers on how to deal with it. For instance, starting out with an autocracy, then how could those with the current political power that stand to lose if democracy adopted, be convinced that they should still support such a transition? How should reform be designed so that such an outcome constitutes a political equilibrium? There are few questions in political economy it seems more pressing to find good answers to.

### 4.3.3 Conditionality

Another possibility than finding reform with domestic support in its own, is to meet domestic political force with foreign political force – which is one way to think about what “conditionality” aims to do. Here some external actors, international organizations or donors, demand that if assistance is to be given this should be met with some type of institutional reforms, or of policy. Drazen (2002, p. 36) discusses the role of international organizations and if they should impose conditionality: “To put it simply, *why is conditionality needed if it is in a country’s best interests to undertake the program in question?* This, to my opinion, is a question which IMF documents struggle and often talk around. I will argue that it is basically impossible to justify conditionality in the absence of a conflict of interest of some sort.” Drazen shows how in a case where there is a conflict between a reformist government and domestic interest groups opposing reform, conditionality may affect the political equilibrium so that the reform is undertaken.

A standard way to impose conditionality, much previously used by the Washington organizations, is to trade assistance for policy. For instance, if assistance is to be given then the currency shall be devalued, free trade adopted, or some subsidies cut. A problem with this way of conditionality is that it attacks the consequence rather than the cause. Why was the policy in place to start with? Presumably, this is because it favours the politically powerful. Using conditionality to make a change in policy therefore, might be an equilibrium in the short run, but is unlikely to be an equilibrium in the long run, unless assistance and conditionality is made permanent. Moreover, specifying a change in one type of policy, which in isolation reduces rents for the politically powerful, might result in compensating behaviour in another policy area to avoid rents being reduced.

One possible, and perhaps natural, consequence of this view is that conditionality should be placed on institutional reform, rather than directly on policy. Institutional reforms that change the distribution of political power, say to introduce democracy, might have more permanent effects than putting conditionality directly on policy. Democratic reform change the political equilibrium, and therefore may be more difficult to reverse. Conditionality that is able to produce permanent changes in the institutional equilibrium, will also produce more permanent changes in policy, compared to if conditionality is put on policy itself.

A counterargument against this view, however, is that it shortcuts the challenge we started with, namely how to make autocracies democratize if it is in the disinterest of the current politically powerful. One could argue, therefore, that this type of conditionality is hard to implement.

In the political economy literature on reform in Eastern Europe a main argument for those who proposed a big bang approach, in particular associated with Jeffrey Sachs, was the complementarity of reforms. Another argument related to complementarity that may be important to think about, is that those with political power who resist institutional reform may not have the power to block all institutional reforms. In such a case, when there is complementarity, inducing reform in one institutional dimension may make it easier to have reforms in others. Thus a possible strategy is to opt for reform in some areas in the hope that it would endogenously result in reforms in others. The literature on the endogenous clustering of institutions suggests that the institutional equilibrium in one dimension depends on the institutional equilibrium in another. Therefore, if one has a better possibility to change institutions in one dimension than in another, the new equilibrium might also involve a new institutional equilibrium in those institutions one cannot change directly.

Let us briefly look at some possible examples from the literature on how such institutional interdependencies may give room for institutional change. Admittedly, this is again a bit speculative, as this is not the topic in any of the contributions discussed below. Nevertheless, it might be interesting to start developing some possible normative implications from the literature on the endogenous clustering of institutions, by asking how changes in one type of institution may induce change in another.

In Besley and Persson (2011) the investment in fiscal capacity is higher the better is legal capacity. Thus, reforming the legal system may crowd in better state capacity also in other dimensions. And the legal system may be easier to reform than institutions more under the direct control of politicians. The crowding in effect of legal institutions on other favourable equilibrium institutions is also present in Acemoglu, Robinson, and Torvik (2013), although for a different reason. Consider a case where when the quality of the judicial system is poor, the voters respond by removing checks and balances from the constitution, since the legal system is not able to prevent politicians being bribed, and the voters therefore want to remove checks and balances so as to make the president strong. In this case, a reform to install checks and balances will backfire: it does not constitute a political equilibrium. However, if a reform in the judicial system is undertaken, then a constitution that involves checks and balances is on the political equilibrium path. The intuition for this is that when the legal system has an increased quality, then it is more difficult to bribe politicians, and in turn this removes the incentive for voters to make the president strong. Thus, as in Besley and Persson (2011), a reform in one institutional dimension induces an equilibrium shift in another institutional dimension.

In Besley and Persson (2011) equilibrium state capacity will be better the more common interest is politics, since then the current political regime need not fear that state capacity will be turned against them should they lose power. Therefore, making policy more common interest crowd in state capacity. Thus if one is able to achieve this, either through democratization, support for free media, or support for civil organizations, then this may increase equilibrium state capacity. The same comparative statics hold in Acemoglu, Robinson and Torvik (2016), albeit again for a different reason. Citizens that organize themselves, endogenously change the political agenda in favour of more general-interest public goods, and away from parochial transfers. In turn, this removes the incentive of political elites not to centralize the state, an incentive that was present to avoid citizens organizing in the first place. Acemoglu, Robinson and Torvik (2016) argue that the emergence of social democratic parties in Scandinavia had such a favourable effect, where (p. 28) “in countries such as Sweden, Norway and Denmark, social democratic parties formed the nexus of citizen organizations in the first half of the 20th century, and managed to coordinate several aspects of citizen-firm negotiations and other citizen demands. The literature on Scandinavian social democracy emphasizes that it was successful precisely because it built multi-class and multi-sectoral coalitions uniting rural and urban interests ... Moene and Wallerstein (2006) have suggested that the creation of social democracy in the 1930s, rather than following it, preceded many of the features of Scandinavian societies commonly argued to undergird social democratic politics, such as social harmony. Like our approach, this argument emphasizes how various societal and state institutions respond to the formation of a powerful social democratic party.”

#### **4.3.4 Windows of opportunity and lock-in of institutions**

The strength of political power fluctuates. Institutions are persistent. A possible policy implication of this is that, when a window of opportunity opens, it is important to reform institutions, since these may permanently alter the institutional equilibrium, so that when the situation is back to normal this does not imply that the institutional equilibrium is the same as what it was before. Using windows of opportunity to change politics rather than institutions may turn out to be less durable.

A related argument is made in Roland (2002), who notes that (p.46) “One important variable that has not been studied seriously so far by economists is the strength of the non-communist elites at the beginning of the transition. A closely related point that was made earlier is discussing the strength of civil society in different transition countries. There is a striking difference between Poland, where the Catholic Church and the Solidarity trade union counterbalanced the communist elites, and Russia, where little counterbalance existed to the former members of the communist ruling class who engaged in a frenzy of asset grabbing once it was clear that the communist regime was dead.” A lesson for donors and international organizations may again be that, in nondemocratic countries, support for civil society that counterbalance the existing ruling elites may improve the prospects for the political and economic development with institutional reform.

But if institutions are nondemocratic, should one insist on democracy being installed before assistance is given, or should one accept the regime and give support in any case? This is a fundamental question where more research is needed, and where there are many issues

that will not be discussed here. For instance, by giving assistance does one stand in danger of reducing the probability of a transition to democracy?

There are some arguments that follow from the literature review above that pulls in the direction of putting much pressure on democratization, rather than waiting and hoping that growth will come first, and democracy endogenously follow. First, as seen in the discussion on if democracy follows growth, the causal connection here is, at best, unclear. Cervellati, Jung, Sunde and Vischer (2014) strengthens the argument against the “income first democracy later view” in that in former colonies higher income actually worsens the prospects of democracy to arise. An additional argument can be found in Acemoglu, Naidu, Restrepo and Robinson (2015), namely that there is an interaction effect of democracy and education on growth, implying that democratization with support for education may give particularly favourable growth effects.

Putting strong pressure on early democratization is also an argument in the situation where it is the current holders of power that resist institutional change. With democracy, their future political power is more uncertain, and moreover may depend positively on the utility they are able to generate for voters. In this sense, democracy may crowd in other good institutions both because those that currently hold power put increased weight on what happens when they lose power (which now happens with a higher probability than under autocracy), and because the decrease in survival probability may be smaller if institutions are reformed in a way that produce better outcomes for the population.

Nevertheless, as pointed out by Acemoglu and Robinson (2016), some authors such as Huntington (1968) and Fukuyama (2011, 2014), see democracy as a final step in the creation of good institutions, arguing that if democracy comes ahead of state capacity there is increased danger that a movement towards good institutions derails. A counterargument against view, however, is that if state capacity develops before democracy, then it is always tempting for the powerful to monopolize their political and economic power, by using the state capacity in their own self-interest.

## 5. Concluding remarks

Few literatures have been more influential within economics over the last 15 years than the literature on institutions and economic growth. The literature has opened new avenues of research, and has integrated important topics also from other social sciences into economics, allowing for a better understanding of development. Two parts of the literature, namely the one on the mapping from institutions to growth, and the positive literature on endogenous institutions, have in particular delivered fundamental new knowledge. Pande and Udry (2005, p. 3) find that “this literature has served its purpose and is essentially complete.” Although that may be to stretch it too far, it does illustrate that in this direction the most important research challenges is to be found ahead.

Another part of the literature, namely that on normative endogenous institutions, has to date not progressed much. This holds true both for the question of how institutional design should depend on initial institutions, and for maybe the most important policy question: how does one undertake necessary institutional reform when those with current power see such reforms as against their own interests?

## References

- Acemoglu, Daron, Simon Johnson, and James A. Robinson. (2001) "The colonial origins of comparative development: An empirical investigation", *American Economic Review* 91, 1369-1401.
- Acemoglu, Daron. (2005) "Constitutions, politics, and economics: a review essay on Persson and Tabellini The economic effects of constitutions", *Journal of Economic Literature* 43, 1025-1048.
- Acemoglu, Daron, Simon Johnson, and James A. Robinson. (2005a) "Institutions as a fundamental cause of long-run growth", Chapter 6 in Philippe Aghion and Steven N. Durlauf (eds.) *Handbook of Economic Growth*, Amsterdam: Elsevier.
- Acemoglu, Daron, Simon Johnson, and James A. Robinson. (2005b) "The rise of Europe: Atlantic trade, institutional change, and economic growth", *American Economic Review* 95, 546-679.
- Acemoglu, Daron, and Simon Johnson. (2005) "Unbundling institutions", *Journal of Political Economy* 113, 949-995.
- Acemoglu, Daron, and James A. Robinson. (2012) *Why nations fail: the origins of power, prosperity, and poverty*. New York: Crown
- Acemoglu, Daron, James A. Robinson, and Ragnar Torvik. (2013) "Why do voters dismantle checks and balances?", *Review of Economic Studies* 80, 845-875.
- Acemoglu, Daron, Suresh Naidu, Pascual Restrepo, and James A. Robinson. (2015) "Democracy does cause growth", Working Paper, MIT.
- Acemoglu, Daron, and James A. Robinson. (2016) "Paths to inclusive political institutions", Working paper, MIT.
- Acemoglu, Daron, James A. Robinson, and Ragnar Torvik. (2016) "The political agenda effect and state centralization", NBER Working Paper No. 22250.
- Alexeev, Michael, and Robert Conrad. (2009) "The elusive curse of oil", *Review of Economics and Statistics* 91, 586-598.
- Allen, Robert C., Tommy E. Murphy, and Eric B. Schneider. (2012) "The colonial origins of divergence in the Americas: a labor market approach", *Journal of Economic History* 72, 863-894.
- Andersen, Jørgen J., and Silje Aslaksen. (2008) "Constitutions and the resource curse", *Journal of Development Economics* 87, 227-246.
- Andersen, Jørgen J., and Silje Aslaksen. (2013) "Oil and political survival", *Journal of Development Economics* 100, 89-106.
- Andersen, Jørgen J., and Michael L. Ross. (2013) "The big oil change: a closer look at the Haber-Menaldo analysis", *Comparative Political Studies*, XX, 1-29.
- Arezki, Rabah, Kirk Hamilton, and Kazim Kazimov. (2011) "Resource windfalls, macroeconomic stability and growth: the role of political institutions", IMF Working Paper 11/142.
- Arezki, Rabah, and Markus Brückner. (2012) "Commodity windfalls, democracy and external debt", *Economic Journal* 122, 848-866.
- Aslaksen, Silje. (2010) "Oil and democracy: more than a cross-country correlation", *Journal of Peace Research* 47, 421-431.

- Bardhan, Pranab (2005) "Institutions matter, but which ones?", *Economics of Transition* 13, 499-532.
- Barro, Robert J. (1996) "Democracy and growth", *Journal of Economic Growth* 1, 1-27.
- Besley, Timothy, and Torsten Persson. (2011) *Pillars of prosperity*, Princeton: Princeton University Press.
- Borge, Lars-Erik, Pernille Parmer, and Ragnar Torvik. (2013) "Local natural resource curse?", unpublished manuscript, Norwegian University of Science and Technology.
- Boschini, Anne D., Jan Pettersson, and Jesper Roine. (2007) "Resource curse or not: A question of appropriability", *Scandinavian Journal of Economics* 109, 593-617.
- Bowles, Samuel, and Herbert Gintis. (2013) *A cooperative species: human reciprocity and its evolution*. Princeton: Princeton University Press.
- Brunnschweiler, Christa N., and Erwin Bulte. (2008) "The resource curse revisited and revised: A tale of paradoxes and red herrings", *Journal of Environmental Economics and Management* 55, 248-264.
- Bulte Erwin, and Richard Damania. (2008) "Resources for sale: corruption, democracy and the natural resource curse", *The B.E Journal of Economic Analysis & Policy* 8(1), article 5.
- Cabrales, Antonio, and Esther Hauk. (2010) "The quality of political institutions and the curse of natural resources", *Economic Journal* 121, 58-88.
- Caselli, Francesco, and Andrea Tesei. (2011) "Resource windfalls, political regimes, and political stability", unpublished manuscript, London School of Economics.
- Caselli, Francesco, and Guy Michaels. (2013) "Do oil improve living standards? Evidence from Brazil", *American Economic Journal: Applied Economics* 5, 208-238.
- Collier, Paul. (2010) *The plundered planet* New York: Oxford University Press.
- Collier, Paul and Benedikt Goderis. (2012) "Commodity prices and growth: an empirical investigation", *European Economic Review* 56, 1241-1260.
- Congdon Fors, Heather, and Olsson Ola. (2007) "Endogenous institutional change after independence", *European Economic Review* 51, 1826-1921.
- Cust, James, and Torfinn Harding. (2015) "Institutions and the location of oil exploration", unpublished, Norwegian School of Economics.
- Dunning, Thad. (2008) *Crude democracy: natural resource wealth and political regimes* New York: Cambridge University Press.
- Easterly, William, and Ross Levine. (2003) "Tropics, germs and crops: how endowments influence economic development", *Journal of Monetary Economics* 50, 3-39.
- Fukuyama, Francis. (2011) *The origins of political order: from prehuman times to the French revolution*. New York: Farrar, Straus and Giroux.
- Fukuyama, Francis. (2014) *Political order and political decay: from the industrial revolution to the globalization of democracy*. New York: Farrar, Straus and Giroux.
- Gelb, Alan. (1988) *Oil windfalls: blessing or curse?* New York: Oxford University Press.
- Gerring, John, Philip Bond, William Barndt, and Carola Morene. (2005) "Democracy and growth: a historical perspective", *World Politics* 57, 323-364.
- Gylfason, Thorvaldur. (2001) "Natural resources, education, and economic development", *European Economic Review* 45, 847-859.

- Haber, Stephen, and Victor Menaldo. (2011) "Do natural resources fuel authoritarianism? A reappraisal of the resource curse", *American Political Science Review* 105, 1-26.
- Hall, Robert E., and Charles I. Jones. (1999) "Why do some countries produce so much more output per worker than others?", *Quarterly Journal of Economics* , 83-116.
- Hodler, Roland. (2012) "The Political Economics of the Arab Spring", CESIFO Working Paper 4023.
- Huntington, Samuel. (1968) *Political order in changing societies*. New Haven: Yale University Press.
- Karl, Terry Lynn. (1997) *The paradox of plenty: oil booms and petro states*. Berkeley: Berkeley University Press.
- Krugman, Paul. (1987) "The narrow moving band, the Dutch disease, and the competitive consequences of Mrs. Thatcher: notes on trade in the presence of dynamic scale economies", *Journal of Development Economics* 27, 41-55.
- Matsen, Egil, Gisle J. Natvik, and Ragnar Torvik. (2016) "Petro populism", *Journal of Development Economics* 118, 1-12.
- Mehlum, Halvor, Karl Moene, and Ragnar Torvik. (2006) "Institutions and the resource curse", *Economic Journal* 116, 1-20.
- Moene, Karl, and Michael Wallerstein. (2006) "Social democracy as a development strategy", in Pranab Bardhan, Samuel Bowles and Michael Wallerstein eds. *Globalisation and Egalitarian Redistribution*, New York: Russel Sage Foundation.
- Michaels, Guy. (2010) "The long term consequences of resource-based specialisation", *Economic Journal* 121, 31-57.
- Monteiro, Joana, and Claudio Ferraz. (2010) "Does oil make leaders unaccountable? Evidence from Brazil's offshore oil boom", unpublished manuscript, PUC-Rio.
- North, Douglass C., and Robert P. Thomas. (1973) *The rise of the western world: a new economic history* New York: Cambridge University Press.
- North, Douglass C. (1991) "Institutions", *Journal of Economic Perspectives* 5, 97-112.
- Pande, Rohini and Christopher Udry. (2005) "Institutions and development: a view from below", Economic Growth Center Discussion Paper No. 928, Yale Unoversity.
- Persson, Torsten, Gerard Roland, and Guido Tabellini. (2000) "Comparative politics and public finance", *Journal of Political Economy* 108, 1121-1161.
- Rigobon, Roberto, and Dani Rodrik. (2005) "Rule of law, democracy, openness and income", *Economics of Transition* 13, 533-564.
- Robinson, James A., and Ragnar Torvik. (2005) "White elephants", *Journal of Public Economics* 89, 197-210.
- Robinson, James A., and Ragnar Torvik. (2013) "Conditional comparative statics", in Daron Acemoglu, Manuel Arellano and Eddie Dekel: *Advances in Economics and Econometrics*. New York: Cambridge University Press. Forthcoming.
- Robinson, James A., Ragnar Torvik, and Thierry Verdier. (2006) "Political foundations of the resource curse", *Journal of Development Economics* 79, 447-468.
- Robinson, James A., Ragnar Torvik, and Thierry Verdier. (2014) "Political foundations of the resource curse: a simplification and a comment", *Journal of Development Economics* 106, 194-198.

- Rodrik, Dani. (2004) "Getting institutions right", *CESifo DICE Report* 2, 10-15.
- Rodrik, Dani, Arvind Subramanian, and Francesco Trebbi. (2004) "Institutions rule: the primacy of institutions over geography and integration in economic development", *Journal of Economic Growth* 8, 131-165.
- Roland, Gerard. (2002) "The political economy of transition", *Journal of Economic Perspectives* 16, 29-50.
- Ross, Michael L. (2001a) *Timber booms and institutional breakdown in Southeast Asia*. New York: Cambridge University Press.
- Ross, Michael L. (2001b) "Does oil hinder democracy?", *World Politics* 53, 325-361.
- Sachs, Jeffrey D., and Andrew M. Warner. (1995) "Natural resource abundance and economic growth", NBER Working Paper No. 5398.
- Sokoloff, Kenneth L., and Stanley L. Engerman. (2000) "Institutions, factor endowments, and paths of development in the New World", *Journal of Economic Perspectives* 14, 217-232.
- Tavares, Jose, and Romain Wacziarg. (2001) "How democracy affects growth", *European Economic Review* 45, 1341-1378.
- Tsui, Kevin K. (2010) "More oil, less democracy: evidence from worldwide crude oil discoveries", *Economic Journal* 121, 89-115.
- Torvik, Ragnar. (2009) "Why do some resource abundant countries succeed while others do not?", *Oxford Review of Economic Policy* 25, 241-256.
- Torvik, Ragnar. (2016) "Should Tanzania establish a sovereign wealth fund?", working paper, The Chr. Michelsens Institute.
- van der Ploeg, Frederick, and Steven Poelhekke. (2009) "Volatility and the natural resource curse", *Oxford Economic Papers* 61, 727-760.
- van der Ploeg, Frederick, and Steven Poelhekke. (2010) "The pungent smell of "red herrings": subsoil assets, rents volatility and the resource curse", *Journal of Environmental Economics and Management* 60, 44-55.
- van Wijnbergen, Sweder. (1984) "The Dutch disease: a disease after all?", *Economic Journal* 94, 41-55.
- Williamson, Jeffrey G. (2009) "Five centuries of Latin American inequality", NBER Working Paper No. 15305.