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Abstract

What are the causes and consequences of human development? In the twenty years since the publication of the first Human Development Report (HDR), political scientists have invested a great deal of time and effort into answering this question. So what do we know? In this paper we seek to review these labors, the fruits of which can be summarized as follows. Democracy causes, but is not caused by, economic development. While total economic growth is no higher as a result of democratic institutions, they are more conducive than non-democratic alternatives to the growth of per capita income, which is an important aspect of individual well-being. Democratic institutions are also conducive to improvements in the two other essential elements of human development, longevity and knowledge - democracy has a positive effect on indicators of education and health. Given these findings, it seems pertinent to ask why democracy has such effects. Our conclusion from the literature is that the positive impact of democratic institutions stems from their provision of accountability structures. But in providing these structures, what democracy offers is the opportunity for human development. It is no guarantee of its realization, and in the absence of factors such as information and participation this opportunity can be missed.

Keywords: Human Development, Democracy, Political Institutions, Accountability, Income, Education, Health.

JEL classification: (I00, O11, O12)

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1 Introduction

What are the causes and consequences of human development? In the twenty years since the first Human Development Report (HDR) was published in 1990, political scientists have put a great deal of time and effort towards answering this question. So what do we know? This paper's purpose is to review these labors, the fruits of which can be summarized as follows. Democracy causes, but is not caused by, economic development. While total economic growth is no higher as a result of democratic institutions, they are more conducive to the growth of per capita income, which is an important aspect of individual well-being. Democracy is also conducive to improvements in the two other essential elements of human development, longevity and knowledge; democracy has a positive effect on indicators of education and health. The positive impact of democratic institutions stems from their provision of accountability structures. But in providing these structures, what democracy offers is the opportunity for human development. It is no guarantee of its realization, and in the absence of factors such as information and participation this opportunity can be missed.

Stated as concisely as this, these conclusions seem flippant. However, this appearance recedes on consideration of the efforts upon which they are grounded, and which this paper attempts to review. Following the division of labor within the literature, we focus first on factors affecting economic growth, before turning to the other elements of human development, education and health. For each, we consider both the theoretical and the empirical claims that have been made. Before doing so however, we take a moment to consider the concept of human development.

2 What is Human Development?

Since the launch of the first HDR by the United Nations Development Program (UNDP) in 1990, it has been widely accepted that human development is about more than just economic factors. Of

course, income is important. But as the pioneering HDR recognized, “income is not the sum total of human life” (UNDP 1990: 9). Instead, the report conceived of human development as being a process of enlarging people’s choices, most essentially by allowing them to lead long and healthy lives, to acquire knowledge, and to have access to the resources necessary for a decent standard of living. Moreover, it recognized that the development process consists not just of the formation of these capabilities, for example through improved health, knowledge, and skills, but also of the use that people make of them to improve the quality of their lives. Therefore in the words of Amartya Sen, it posited that human development is about, “advancing the richness of human life, rather than the richness of the economy in which human beings live” (<http://hdr.undp.org/en/humandev/origins/>).

By broadening the focus of development beyond the narrow economic means in order to recognize the human ends, the HDR highlighted three essential elements of human life - longevity, knowledge, and decent living standards. In so doing, it made clear that evaluating human development requires more than simply a measure of income, because this is only an indicator of the third element (standard of living), and a fairly crude one at that. Rather, measures of income need to be complemented with indicators of the other two elements, thus bringing into focus factors such as life expectancy, health, literacy, and educational attainment. If human development is a process, all of these factors and more are symptomatic of its progression. Fortunately, recognition of this fact has grown steadily since the UNDP’s groundbreaking report was published in 1990. Twenty years on, it is timely to consider what we have learnt as a result: what do we know about the causes and consequences of human development, so conceived? And, more specifically, what conclusions can be drawn about the role that institutional and structural factors play in human development? In reviewing the political economy of human development this paper seeks to provide some answers.

Despite the recognition that human development has multiple components, however, a disproportionate amount of scholarly work has ignored what we might think of as the more “human” indicators of human development. Instead it has focused on income and economic growth, and

in particular on their relationship with formal political institutions, most notably regime type. In so doing, this body of work has produced a number of very important theoretical and empirical insights. While these shall be reviewed in detail in section 3, two significant conclusions are worth summarizing here. First, despite the appeal of modernization theory, the weight of evidence suggests that economic development does not cause democracy. Second, democracy promotes economic development. This is not to say that democratic institutions are an economic panacea; the formal institutions of democracy encourage certain aspects of economic development and undermine others, and these effects vary across different types of democratic institutions. But the aggregate effect of democracy on per capita income is positive, and thus we can begin to conclude that democracy promotes human development. However, as was made clear by the words of Amartya Sen, this view of human development is a limited one. If our interest is in human development as the HDR more fully conceived it, we need to focus on all the factors that affect “the richness of human life”.

Although economic growth has attracted the lion’s share of academic interest, other indicators of human development have not been completely forgotten. For example, excellent theoretical work has considered the effect of political institutions on the provision of public goods and the development of human capital, and empirical studies have sought to investigate the determinants of longevity and literacy. In so doing, these and other similar studies suggest quite conclusively that democratic institutions have a positive impact on human development. That these conclusions remain suggestive is likely due in part to variation in the types of democratic institutions found around the world. Perhaps more importantly though, a number of studies have also highlighted the importance of non-institutional variation among the world’s democracies, such as that which results from differences in the nature of political competition, and in the availability of information (factors which are also likely to be interconnected), all of which will be reviewed in section 5.

For now, it should suffice to note a simple yet crucial take-home point. When it comes to promoting

human development, democracy is good, but not all democracies are equally good. With this in mind, we can suggest a possible preemptive conclusion: democratic institutions provide the opportunities for human development, but these opportunities may be missed. This conclusion leaves us with the clear goal of discovering how to unlock democracy's potential. While such a discovery is well beyond the grasp of this paper, we will try to highlight some implications from the literature, which might point us in the right direction.

3 The Political Economy of Human (Economic) Development: Living Standards

As noted above, a significant proportion of the literature on the political economy of development focuses on the economic aspect, considering factors that determine income or economic growth. Moreover, there is something of a bias in this literature towards formal political institutions; the question most frequently asked is whether democratic political institutions are more favorable to economic growth than the dictatorial alternatives. Indeed, this question has sustained a veritable industry within political science, and may almost be viewed as an entire sub-field in itself. In recent years a great deal of effort has been put to the purpose of empirically investigating this relationship, but before discussing the fruits of these labors it is worth taking a moment to consider their theoretical foundations. Why should we expect there to be a relationship between democracy and economic development, in either direction?

3.1 Theories

The starting point for much of the thinking about how democracy and economic development are related was Seymour Martin Lipset's famous 1959 essay "Some Social Requisites of Democracy: Economic Development and Political Legitimacy" (Lipset (1959)). As the foundation of what has become widely known as modernization theory, Lipset conjectured that there exists a positive relationship between democracy and economic development, claiming that, "The more well-to-do a nation, the greater the chances that it will sustain democracy" (Lipset 1960: 31). After Lipset set the ball rolling, modernization theorists took it up with abandon, enthusiastically pushing the claim that economic development increases the likelihood of democracy.

This reasoning was based on various hypotheses concerning the effects of economic development. Simply stated, it was argued that economic development leads to a moderation of processes of political conflict, by: (1) giving rise to a democratic culture, in part as a result of increases in education levels; (2) reducing the intensity of struggles between socioeconomic classes, following a rise in the income and economic security of the masses; and (3) decreasing the premium on political power by reducing the costs of redistribution (Lipset 1960: 39-52). In addition to these changes in socioeconomic structures, it was also argued that economic development leads to the emergence and proliferation of civil society organizations, which undermine the effectiveness of dictatorial forms of political control by increasing participation, by generating and spreading alternative political perspectives, and by encouraging the more widespread development of political skills. Despite periodic challenges, most notably that from the dependency school (Diamond 1992: 473), the modernization approach dominated work on the relationship between development and democracy right through to the 1990s.

Two key points about modernization theory are worth noting at this stage. First, it sees causality as running from development to democracy, and thus far nothing has been said about the reverse

effect, of democracy on development. In addition, it posits an endogenous relationship between economic development and political institutions, whereby democracy is the final stage in a single, general process. We will come back to the first point in just a moment. With regards to the second, this endogenous approach is just one of two possible ways to read Lipset, as Przeworski and Limongi (1997) piercingly pointed out. Modernization theorists claim that that upon reaching a certain level of economic development, countries will democratize. However, the alternative exogenous reading of Lipset's hypothesis is that economic development has no effect whatsoever on the likelihood of a country actually becoming democratic, but that given the existence of democracy, economic development increases the probability of its survival.

Importantly, these altogether different claims imply the same positive correlation between economic development and democracy, a correlation whose existence is evident from even a cursory glance at the aggregate data (for which see Przeworski and Limongi, 1997: 156). If rich countries are just as likely to establish democracies as they are dictatorships, but rich democracies are less likely to collapse than poor ones, then this correlation will be produced by the simple passage of time. But if economic development does not cause democracy, why should it promote democratic survival? Przeworski's answer is that democracy is more likely to survive in rich countries because there is too much to lose from turning against it.

In poor democracies there is little to distribute, so a group's income will not be much higher than it would be under a dictatorship, irrespective of whether that group wins or loses an election. Therefore in poor democracies a group has little to lose in seeking to overturn democratic institutions in order to set up a dictatorship with itself at the helm. In rich countries, on the other hand, there is a large difference between the income of a group that loses democratic elections and that of a group oppressed by a dictatorship. Therefore even though the returns to a successful anti-democratic coup may be very large, in rich countries the possibility of failing presents sizable costs, such that "even permanent electoral losers prefer to obey election results" (Przeworski 2004: 11). As

a result, when economic development increases in a democracy, so too does the probability of democratic survival.¹

Although this claim is vastly different to that made by the modernization theorists, it does remain focused on the question of how development affects democracy. Yet this is only one way of thinking about the relationship. It is also entirely possible that causality runs in the opposite direction, and therefore that the observed correlation results from a positive effect of democracy on economic development. In which case, it is also pertinent to ask why this might be the case. To which the most popular answer concerns the role of property rights and constraints on government. This approach is epitomized by Mancur Olson's argument, that only the formal institutions of democracy are capable of providing the conditions necessary for long-term, stable economic growth. More specifically, Olson claims that an economy can only reap all the potential gains from investment if the government can commit to uphold individual rights to property and enforce contracts. Dictatorships are prevented from doing so by the inevitably limited time horizons that they face. Lasting democracies, on the other hand, rely on a set of conditions - the rule of law, the existence of an independent judiciary, a functioning court system, etc. - whose existence also happens to provide for the individual rights that are necessary for economic development. Therefore long-run economic development is only possible in democracies, because it is only these systems that provide protection of the necessary individual rights (Olson (1993)).

It seems then that there may indeed be good reasons to expect a relationship between political institutions and levels of economic development. However, whether these reasons are valid remains to be seen. Moreover, there are reasons to think that the causal effect of this relationship runs in both directions, which is problematic. Fortunately for us, a great deal of empirical vigor has been directed towards assessing this issue, and so it is to this that we now turn.

¹In a recent formalization of this relationship, Przeworski has shown that democratic survival depends not only on economic development, but also on the level of inequality in a country (Przeworski (2005)).

3.2 Evidence

As noted above, the relationship between income and democracy has garnered an enormous amount of attention from political scientists, with numerous studies focusing on both: (1) how economic development affects institutions; and (2) how institutions affect development. Let us start with the first question, on which evidence has shifted opinion back and forth over the years as analyses have grown ever more sophisticated. Recently however, a single, pertinent conclusion has gained increasing weight: economic development does not cause democracy. In a seminal work on this matter, Adam Przeworski and Fernando Limongi effectively sounded the death knell for modernization theory by demonstrating emphatically that democracy does not emerge as a result of economic development.

Przeworski and Limongi's careful and rigorous analysis showed that although the probability of a dictatorship transitioning to democracy does increase as per capita income rises up to the level of about \$6,000, it then decreases beyond this point. Moreover, while a handful of countries fit the modernization pattern, there is no evidence to suggest that sustained economic development will lead authoritarian regimes to transition to democracy, and no level of income predicts when such a transition should occur (Przeworski and Limongi (1997); Przeworski et al. (2000)). By contrast, there is strong evidence that economic development increases the probability of democratic survival. Specifically, democracy has never collapsed in a country with a per capita income higher than \$6,055 - that of Argentina in 1975 (Przeworski 2004: 9). These findings strongly suggest that the relationship between income and democracy does not result from one causing the other. Rather, it seems that economic development has the effect of increasing regime stability, and importantly even more so for democracies than dictatorships.

The claim that economic development does not cause democracy has not gone unopposed. It has been argued for example that in more fully specified models, and in analyses that are extended

back to cover longer periods of history, economic development does indeed appear to affect the probability of a transition to democracy (Boix and Stokes (2003); Coppedge (2003)). In addition, Przeworski et al. have also been criticized for using a dichotomous measure of democracy. Undertaking the analysis with a continuous measure, Hadenius and Teorell claim that while economic development does indeed have no effect on political institutions in states “at the bottom of the democracy ladder”, it has an (increasing) effect among those that are already “semi-democracies” (Hadenius and Teorell 2005: 102). Similarly, Barro (1999) shows a positive effect of per capita income on democracy, when the latter is represented by electoral rights or civil liberties.

However, confidence in the results from many of these analyses is weakened by recognition of various enduring methodological problems. In a more recent reevaluation of the relationship between income and democracy, Acemoglu et al. argue that previous studies fail to establish any causal relationship because they suffer from serious omitted variable bias, and because they ignore the possibility of reverse causality (that democracy may cause income). By employing fixed effects to control for any country-specific factors that may simultaneously determine both institutions and growth they show that there is in fact no relationship between changes in per capita income and changes in democracy. In addition, using past savings rates and changes in the incomes of trading partners to instrument for income, they show no evidence for a causal effect of income on democracy. Instead, they suggest that the correlation between income and democracy may be explained by the fact that countries were set on particular development paths at critical junctures in history, some of which were conducive to both economic and democratic development (Acemoglu et al. (2008)). Therefore despite all the attention, it seems fairly safe to conclude at this point in time that economic development does not cause democracy.

What then does the evidence have to say about the alternative possibility, that democracy causes economic development? Fortunately for us, this issue has also received a great deal of attention. One very effective and straightforward approach to the question has been to use a difference-

in-differences strategy to look at how sudden changes in political regimes affect per capita income. The firm consensus arising from a number of recent studies that have used this approach is that transitions to democracy do indeed promote economic growth (Papaioannou and Siourounis (2008); Rodrik and Wacziarg (2005); Giavazzi and Tabellini (2005); Persson and Tabellini (2006)). In a further methodological advance, Persson and Tabellini (2008) employed a semi-parametric approach by combining difference-in-differences with matching. Doing so overcomes the strong indentifying assumptions necessitated by a straightforward difference-in-differences approach, thereby arguably yielding consistent estimates of the average effect of political regime changes. As a result of which, they find that reverse transitions, from dictatorship to democracy, lead to a 2% decrease in economic growth, an effect which equates to a 45% loss of per capita income over a 25 year period (Persson and Tabellini 2008: 26). This useful body of empirical evidence strongly suggests a positive effect of democracy on economic development, the importance of which should not be understated. Where it falls down however, is in failing to illuminate the causal mechanisms underlying this relationship. If democracy does in fact have such a positive effect on growth, how can we explain this effect?

Taking a more nuanced approach to the question of how democracy affects income, a groundbreaking and elegant work by Acemoglu, Johnson and Robinson (2001) makes a compelling case for the causal effect of formal political institutions that limit government. Taking differences in European settler mortality rates as an exogenous determinant of contemporary political institutions, they identify large effects of institutions on per capita income. Importantly, and in a nod to Mancur Olson, their interest is in institutions that provide for property rights and checks on government power, for which they use the protection against “risk of expropriation” index from Political Risk Services as a proxy (Acemoglu, Johnson and Robinson 2001: 1370). These findings have been corroborated by numerous other studies, which have put forward further evidence that the political institutions of limited government cause economic growth (e.g. Easterly and Levine (2003); Dollar

and Kraay (2003); Rodrik, Subramanian and Trebbi (2004)).

Inevitably though, these conclusions have been called into question, in part due to the fact that the measures used to describe political institutions fail to do so adequately, and are in fact more appropriately seen as outcomes rather than inputs (Glaeser et al. 2004: 273). Moreover, it has been argued that levels of human capital better predict economic growth than do institutions of limited government, and that institutional improvement should be seen as a result of economic growth, rather than the other way round (Glaeser et al. (2004)). As a consequence of this continuing debate, it is at present unclear whether growth is caused by limiting institutions or by human capital (or indeed by some other aspect of democracy). Future work should therefore continue to ask what it is about democracy that promotes economic development. It is also likely that different varieties of democracy have differential effects on development - for example, analyses have shown that while presidential systems grow faster, parliamentary democracies spend and liberalize more (Persson and Tabellini (2006)). Consequently, if we are to fully understand the effect of democracy on economic development, it may also be useful to differentiate between varieties of democratic institutions, as well as between different aspects that are common to all democracies.

As well as breaking down democracy, however, it is also important to recognize that there are multiple channels of economic growth through which the effect of democracy might operate. In a useful earlier analysis, Tavares and Wacziarg (2001) sought to break apart these different channels, and found that democracy has inconsistent effects. In contrast to the more recent difference-in-differences studies noted above, Tavares and Wacziarg found the overall effect of democracy on total economic growth to be moderately negative. More specifically though, and perhaps more interestingly, they found that while democracy fosters growth by increasing human capital accumulation and reducing inequality, these positive effects are offset by a reduction in physical capital investment rates and higher levels of government consumption.

Taking a similar approach, Przeworski (2004) breaks economic development down into its various component parts - the share of investment in gross national product, the rates of growth of capital stock and of labor force, and the rates of growth of total income and per capita income - and examines the impact of political regimes on each of these. In so doing he finds that, contrary to Tavares and Wacziarg, regimes have no effect on investment or capital stock accumulation. This is not to say that regimes do not matter - while the labor force grows faster under dictatorships, it is used more effectively in democracies. And while dictatorships are better at exploiting their capital stock, technological progress is faster in democracies. Thus when the various elements of economic development are considered separately, democracy has both positive and negative effects. These findings highlight important differences in the nature of economic development under different types of regimes. However, taken together the overall rate of total income growth is no different in dictatorships than it is in democracies. At first glance this aggregate finding appears to jar with the claim from more recent studies, that democratic transitions have a positive effect on economic growth. But this is not the case, because Przeworski highlights a crucial difference between democratic and dictatorial regimes; significantly faster population growth under dictatorships means that, despite the two regimes having equivalent levels of total income growth, per capita incomes grow faster under democracies (Przeworski 2004: 17).

Therefore we have some answers. While economic development may increase the probability of democratic survival, income does not cause democracy. Rather, democracies promote economic development. Precisely what it is about democracies that has this effect remains somewhat uncertain. What is clear though, is that democracy is not a panacea for economic development. Democracies and dictatorships each benefit different aspects of economic development, such that total income growth is largely unaffected by political regimes. However, as a result of demographic differences across regimes, per capita income grows faster under democracy. This fact is crucial for the political economy of human development, which is concerned with the well-being

of individuals, not of the economy in which individuals live; from the point of view of individual well-being, what matters is not the growth of total income but of per capita income (Przeworski 2004: 17). Therefore if we take per capita income as a proxy for living standards, we can conclude that formal political institutions, and more specifically democratic political institutions, increase this aspect of human development. As the 1990 HDR made clear, however, human development is about more than just income. So, what of its other components?

4 The Political Economy of Human (Human) Development: Knowledge and Longevity

As a proxy for living standards, income is but one aspect of human development - remembering Sen, human development is concerned more generally with “the richness of human life”. For this richness to be fully realized requires the enlarging of people’s choices, not just by ensuring that they have the resources necessary to achieve a decent standard of living, but also by allowing them to lead long and healthy lives, and to acquire knowledge. Stated more simply, human development is not just a matter of income, but also of education and health. Just as with the determinants of income, we are again fortunate that a great deal of scholarly attention has also been directed at the political economy of these elements of human development. The primary focus of these efforts has been on the effect of formal political institutions at the macro level (regimes). In addition, a number of very useful studies have also looked at more informal aspects, such as the nature of political competition, and factors affecting levels of accountability. Before reviewing the empirical conclusions of this work, it is again worthwhile to consider the theoretical arguments.

4.1 Theories

Why might democracy affect education and health? The relationship between formal political institutions and the provision of public goods such as these is one that has been considered at length, and various explanations have been suggested for why we should expect such a relationship to exist. Following Besley and Kudamatsu (2006), these can be broken down neatly into three categories, focusing on issues of: (1) representation; (2) accountability; and (3) selection. In an example of the first, Acemoglu and Robinson (2001) develop a model whereby autocracy is a dictatorship of the rich and democracy is a dictatorship of the poor or middle classes. As a result, we might expect greater public goods provision under democracy because the people represented by those in control of this type of system are likely to have higher preferences for redistribution and public services. This logic is echoed in part by Vollmer and Ziegler (2009), who argue that democratic regimes should provide more public goods than dictatorships because they are responsive to the higher redistributive concerns of the decisive median voter, concerns which are taken to encompass the provision of public goods and services. Authoritarian regimes, on the other hand, have no such incentives to redistribute in response to the needs of their citizens, and therefore fewer public goods are provided. These arguments are appealing for their intuitive simplicity, but they fail to adequately account for the dynamics of political competition, and for the incentives of political actors.

The second category of explanations deals with these issues more completely, by emphasizing the importance of accountability. From this perspective public goods provision is higher under democracy because elections render politicians accountable to the electorate. As a result, politicians are required to distribute public goods to a wide segment of the population in order to stay in office. This logic has been most famously and effectively expounded by Bueno de Mesquita et al. (2001), who focus on the size of a regime's "minimal winning coalition", the support of which is necessary if leaders are to retain power. This support can be won through the distribution of public

or private goods. By virtue of their formal political institutions (namely, elections), democracies have large winning coalitions, whose support is bought much more cheaply with public than with private goods. And as a consequence, more public goods will be provided under democracy.

The essence of this explanation was foreshadowed by Bates (1984), who recognized that in the absence of competitive elections, authoritarian regimes in Africa were able to ignore the demands of the vast rural majority, focusing resources instead on the minority urban interests whose support was necessary to retain power. In addition, a related argument put forward by Lake and Baum (2001) also recognizes the importance of political competition, but focuses on the barriers to exit for politicians and the costs to participation for citizens, rather than simply the size of the coalition whose support is necessary to stay in power (see also Baum and Lake (2003)). Starting from the assumptions that all states seek to maximize rents, and that fixed budgets mean that rents are a function of the public services that are produced, Lake and Baum argue that a state's ability to extract rents is constrained by the contestability of the political market. In a democracy, lower barriers to exit and lower costs to participation make the political market more contestable, thereby increasing the provision of public services. Again then, what matters from this perspective are the formal political institutions that lie at the heart of democracy - competitive elections.

Democratic elections make politicians more accountable to the general public. Whether one pitches it as leaders buying support or as citizens demanding recognition, the outcome is the same: by virtue of elections, democracy increases the provision of public goods. The strength of this category of explanations comes from the fact that they are explicit about the incentives of political actors, and about the institutional structures shaping these incentives. As a result, they are unambiguous with regards to what it is about democracy that increases the provision of public goods. Although the theoretical arguments emphasizing representation may rest implicitly on the effects of elections, they are not explicit about this fact in the same way. A third category of explanation that focuses on selection is even less effective in this regard, but is still worth noting. Besley and

Kudamatsu suggest that democracies have “stronger mechanisms for selecting competent and honest leaders to implement policy” (Besley and Kudamatsu 2006: 314). The implication here is that democracy will lead not just to more but also to better public service provision than autocracy. Just as in the first two categories of explanation, elections play a key role in this argument. However, it relies on the assumption that democratically elected leaders are more honest and competent than their authoritarian counterparts, and whether this is true remains to be seen.

In an interesting refinement on the accountability explanation, Mani and Mukand (2007) have argued that the incentives for elites to provide public goods varies across types of goods according to their “visibility”, where visibility refers to the likelihood that elites will gain credit from voters for the provision of the good. For example, reducing mortality through famine relief is much more visible than doing so by preventing malnutrition, even if the overall impact on mortality is much lower. Modeling democracy as a continuum, Mani and Mukand argue that democratization widens the gap in resource distribution between more and less visible public goods, up to an intermediate level of democracy, beyond which the gap diminishes. The key point to note is that democratic political institutions alter incentives to provide different types of public goods, so not all public goods will be improved by democracy. This important recognition, that the specific nature of goods matters, only arises due to the fact that the theory is explicit about the incentives that drive politicians to provide public goods.

What we have then is a body of theory regarding the effects of formal democratic institutions on the provision of public goods, the most convincing branch of which argues that democracies provide more public goods because of the accountability generated by competitive elections. But it is also possible that accountability is promoted by factors other than formal institutions, which affect the performance of these institutions. Phil Keefer (2004) recognizes insightfully that imperfections in political markets can reduce levels of accountability, thereby undermining the positive effects of democratic institutions. Two possible sources of such imperfections that he highlights are infor-

mation and credibility. Where citizens lack information about the performance of political elites, they are unable to hold those elites to account. Likewise credibility, or the extent to which voters can believe the pre-electoral promises of candidates, is essential if citizens are to hold politicians responsible for poor performance (Keefer 2004: 265). By modeling the behavior of non-credible politicians, who can either build up credibility by expending their own resources or employ patrons to act as credible intermediaries, Keefer and Vlaicu (2008) predict that a lack of credibility will result in corruption, clientelism, and low provision of public goods. Recognizing the importance of information also brings us back to the insights from Mani and Mukand, because varying the information environment will affect the visibility of public goods, thereby altering politicians' incentives to provide them, and preventing the best policies from being realized.

What these arguments highlight is that there are limitations to democracy. Where citizens can effectively hold politicians accountable for policy, democratic institutions can pave the way for human development. But this outcome is not guaranteed. In the absence of accountability, the provision of public goods can be undermined by corruption and clientelism. Formal institutions alone may not be enough to promote development, if politicians can win elections and maximize rents by other means. It is therefore important to recognize the incentives created by democratic institutions, and to consider how best to align these incentives with policies that will best promote human development.

Thus far we have focused on factors that influence the provision of public goods, and thus affect levels of education and health. However, it is also necessary to recognize the possible endogeneity in this relationship. Specifically, it has been argued that higher levels of education affect the nature of political institutions, by increasing the likelihood of democracy. Modeling this relationship, Bourguignon and Verdier (2000) and Glaeser, Ponzetto and Shleifer (2007) predict that higher levels of education increase the likelihood of a democratic transition. Both models are based on the assumption that education increases the benefits to political participation, which is important

because democracy requires broad participation by individuals who have weak incentives to do so. While certainly interesting, it is unclear that the models actually make predictions about the effect of education because, and Glaeser et al. admit, it applies to any device that increases incentives to participate (which presumably includes money, and guns). That being said, they highlight an important question concerning the direction of causality, which must be taken into account when attempting to investigate the existence of any causal effects.

The most important point to take from this is that not all democracies are created equal. We have good reason to believe that, because of the accountability afforded by formal (electoral) institutions, democracies will provide more public goods than dictatorships. Added to this, however, there are also reasons to think that some democracies will provide more public goods than others, because informal structures can alter the effectiveness of this accountability. And in addition, there is the ever-present possibility of endogeneity. The necessary question that follows is: what do we know about the validity of these arguments? The following section reviews results from empirical investigations of the determinants of public goods provision, and in particular of education and health.

4.2 Evidence

Although less numerous than studies of income and economic growth, there nevertheless exists a fairly sizable body of research looking at whether, and how, formal political institutions affect health, and even more on their relationship with education. Let us consider education first.

4.2.1 Education

Although numerous studies have provided evidence for the existence of a relationship between political institutions and education, the causal direction of this relationship is disputed. A strong case has been made for the claim that education affects political institutions. Specifically, the argument is that higher aggregate levels of education increase the likelihood of a country becoming and staying democratic. This claim was initially made on the basis of evidence that changes in years of schooling predict changes in democracy, but not vice-versa (Glaeser et al. (2004); Glaeser, Ponzetto and Shleifer (2007); Papaioannou and Siourounis (2008)). However, these findings have been disputed on the basis that they result simply from a simultaneous increase in both education and democracy throughout the world over the last 35 years, and that including year dummies and country fixed effects removes any impact of education on democracy, as well as on other political institutions (Acemoglu et al. (2005); Mulligan, Gil and Sala-i Martin (2004)). In a methodological retort though, subsequent studies have argued that more appropriate statistical techniques do in fact show a causal effect of education on democracy, even when country and temporal effects are taken into account (Castelló-Climent (2008); Bobba and Coviello (2007)). In the midst of these statistical squabbles it is therefore impossible to say conclusively whether or not education has an impact on the choice of formal political institutions.

However, it is worth noting at this juncture that education can be conceived of in a variety of ways, and that the specific aspect of education that these studies focus on is human capital stock. All of the analyses cited above use a variable for aggregate educational attainment, taken from an excellent dataset which contains average years of school completed by each country's adult population aged 25 and over, at five year intervals from 1965 to 1995 (Barro and Lee (2001)). As such, this data provides an incredibly useful measure of human capital stock at the national level. This is certainly an important aspect of education, and given the theoretical propositions is arguably the most relevant conception with regards to the question of whether education affects

political institutions. But in addressing the causes of human development it is less useful, because it is likely to be extremely slow-moving. The immediate effects of institutional change on education, for example, will be felt by those of school-age, not adults aged 25 and over. Therefore a measure that aggregates educational attainment for all adults will not reflect these effects until those actually affected reach the age of 25, and even then their impact on the aggregate measure will be swamped by their elders. This suggests that a more sensitive measure is needed if we are to investigate the determinants of education effectively.

That being said, the Barro and Lee data has been used to demonstrate a significant effect of democracy on educational attainment, even controlling for country fixed-effects (Tavares and Wacziarg (2001)). But the fact that the measure is so slow-moving means that while this is interesting it is perhaps not all that useful. Alternative measures of education outputs are literacy and school enrolment rates, and data on both of these is included in the set of World Bank Development Indicators. Using this data, various analyses have shown a positive and significant impact of democracy on enrolment, which much better captures the immediate effect of institutional change (Brown (1999); Lake and Baum (2001); Tsai (2006)). Democracy has also been shown to have a similar effect on literacy (Lake and Baum (2001); Tsai (2006); Vollmer and Ziegler (2009)).

In addition, studies have used government spending figures as a measure of educational inputs, and have shown it to be increased by transitions to democracy (Stasavage (2005); Tsai (2006)). As is always the case, it is important to recognize that this data is not without flaws, as it relies on assumptions about the validity and honesty of government-reported figures. Moreover, an increase in inputs does not necessarily imply the same for outputs. Nevertheless, the weight of evidence strongly supports a positive effect of democracy on education, whether it is conceived in terms of the resources being put in, or the fruits that they produce. One weakness of the empirical work that investigates the relationship between democracy and education is the exclusive use of macro-level data. One exception to this is the study by Hecock (2006), who uses data on primary education

spending across 29 Mexican states between 1999 and 2004 to demonstrate that the competitiveness of democratic elections also affects education spending, with higher levels of spending in more competitive areas. A useful next step would be to shift the analysis down even further, to the individual-level.

4.2.2 Health

A number of studies have also considered the relationship between political institutions and the third key component of human development - longevity. Again, the vast weight of evidence supports a positive impact of democracy, and here there is no controversy over the direction of causality; there is no suggestion that longevity promotes democracy. The UNDP's human development index incorporates data on life expectancy at birth as a measure of longevity, and a number of studies have used this same indicator to show a positive effect of democracy (Lake and Baum (2001); Franco, Alvarez-Dardet and Ruiz (2004); Besley and Kudamatsu (2006); Tsai (2006); Vollmer and Ziegler (2009)).

For the most part these studies have taken a fairly straightforward approach to demonstrating the existence of a positive relationship between a country's political institutions and the average life expectancy of its citizens, although some do a better job than others of controlling for time trends and unobserved country-specific factors. Democracy has also been shown to have a positive effect on others indicators of health - compared to dictatorships democracies have lower mortality rates, and fewer women die in childbirth (Przeworski (2004)). In addition, another popular health indicator is infant mortality, which has been found to be significantly lower in democracies (Zweifel and Navia (2000); Shandra et al. (2004); Siegle, Weinstein and Halperin (2004)). Indeed, Lake and Baum (2001) find that a full transition to democracy reduces infant mortality by five deaths per thousand, and Przeworski (2004) finds that the positive effect of democracy on infant survival

rates remains after controlling for selection effects. On this evidence then, it would seem that political institutions do matter for longevity.

Despite such strong support though, Michael Ross rejects this finding on the basis that many of these studies have used biased samples, excluding high-performing “nondemocracies” for which data is unavailable. After statistically imputing these missing observations, Ross finds that once these nondemocracies are included, regime type has little or no effect on infant mortality rates. While he accepts that democracies spend more on healthcare, his claim is that the benefits of this additional spending bypass the poor, accruing instead to middle- and upper-income groups (Ross (2006)). However, with the macro-level data that Ross employs it is not possible to disaggregate between income groups in a way that would enable this claim to be evaluated. Instead what is required is a shift to micro-level data.

Undertaking just such a shift, Masayuki Kudamatsu uses individual-level data from the Demographic and Health Surveys to analyze the “within-mother” effect of democratization on infant mortality across 28 countries in sub-Saharan Africa (Kudamatsu (2007)). By comparing the survival probabilities of infants born to the same mothers before and after a democratic transition, Kudamatsu is able to identify the effect of institutional change much more precisely. In so doing, he finds a positive and significant effect - infants are more likely to survive under democracy. A useful next step would be to use this data to investigate whether or not these benefits are felt differently across income groups, as Ross suggests.

Moving on from mortality rates, a number of scholars have started to get more creative in finding different indicators of health. Focusing on the question of how regime type affects the poor, ? use intriguing data on average daily calorie consumption to investigate whether certain regime types are better at translating economic growth into consumption for the poorest citizens. With this data they provide evidence that democracies are better than autocracies at converting economic growth

into calorie consumption. In addition, Kahn (2005) uses a dataset on annual deaths from disasters in 73 countries from 1980 to 2002 to provide evidence that democracies suffer less death from natural disasters than non-democracies do.

As with education then, while there is no consensus with regards to the effect of democracy on longevity, the weight of evidence suggests that political institutions do matter for health. Certainly, our knowledge of this relationship would benefit hugely from more work like that by Kudamatsu, which seeks to identify these effects at a micro-level; focusing on the individuals affected by institutions is needed if we are to fully understand the causes of human development. On the whole though, it seems reasonable to conclude that institutions matter; in terms of education and health as well as income, democracy appears to have a positive effect on human development. However, as the cautious tone of this conclusion suggests, formal institutions are not a cure-all. Democracy is not simply good *per se*, but is good because it provides opportunities. As discussed above, how to make the most of the opportunities provided by the formal institutions of democracy is a separate question, to which we turn now.

5 What is it about democracy that matters?

As noted above, the most convincing arguments for why formal democratic institutions are beneficial to human development are those that focus on accountability. In fact, as Tsai (2007) has shown with regards to China, even in the absence of democracy public goods provision (and thus human development) can be encouraged by informal accountability structures. Informed by in-depth fieldwork in 316 rural Chinese villages, Tsai argues that the presence of “solidary groups” increases the quality of local public goods, because such groups spread information about the performance of local officials. Officials are sensitive to this information because it affects their moral standing in the community, thereby operating as an alternative to electoral incentives. This argument fur-

ther supports the idea that accountability structures underpin the positive impact of democracy on human development.

Tsai's results add further weight to the findings from previous studies of the relationship between elections and public goods provision in rural China. Using data from a survey of Chinese villages, Zhang et al. (2004) and Luo et al. (2007) find that elected local leaders tend to shift direct tax burdens from households to enterprises when they are available, resulting in an increase in the provision of local public goods. Moreover, the role of information in Tsai's argument echoes Keefer's claim, that the benefits of accountability afforded by formal democratic institutions may be affected by other factors, and in particular by information and credibility. If this is true, we are faced with further empirical questions: do these factors affect accountability, and does this in turn affect human development? Fortunately, these questions have been addressed by a number of theoretical and empirical studies.

In a purely theoretical work, Majumdar, Mani and Mukand (2004) develop a model of public spending allocation, in which access to information varies across different groups of voters, thereby affecting their ability to evaluate the government's performance. As a result, they predict that more informed groups of voters will receive higher allocations of public spending. Similarly, Besley and Burgess (2002) model the retrospective voting decisions of imperfectly informed citizens to show how varying the level of media activism alters the incumbent's re-election chances, and thus affects how much effort the incumbent exerts. In an empirical test of this claim - that information from the media improves government responsiveness by increasing accountability - they show that state governments in India react more effectively to falls in food production and crop flood damage via public food distribution and calamity relief expenditure in areas where newspaper circulation is higher. As a result, they claim that for the potential benefits of formal democratic institutions to be realized "requires effective institutions for information transmission to voters" (Besley and Burgess 2002: 1446).

Analyses of public spending patterns in the US have also demonstrated the effect of information provided by the media. The number of radio listeners in a county significantly increased the amount of relief funds received under the New Deal, and federal spending is significantly lower in areas where there is less press coverage of the local members of congress (Stromberg (2004); Snyder Jr and Stromberg (2008)). In addition, further empirical support for the role of information in accountability has been provided by Ferraz and Finan (2008), who show that the disclosure of local government corruption in Brazil significantly alters the re-election success of incumbent mayors. Moreover, there is also strong evidence that in improving accountability, information has a positive impact on human development. Chowdhury (2004) finds that corruption is significantly lower in countries with more press freedom. If we take corruption to be a function of public services (see Lake and Baum (2001)), a reduction in corrupt practices should correspond to an increase in public service provision, with subsequent benefits to human development.

Adopting a micro-level approach to the question, Reinikka and Svensson (2004) have also shown that access to information can reduce rents. Using proximity to newspaper outlets as a measure of information in Uganda, they show that head teachers in schools closer to a newspaper outlet are more knowledgeable of the rules governing grant programs and the timing of releases of funds by the central government, enabling them to claim a significantly larger part of the funds to which they were entitled. In addition, they show that a newspaper campaign providing parents with information to monitor local officials' handling of a large education grant program significantly reduced the capture of funds by local government officials. As well as demonstrating the power of information to reduce corruption, however, they also show that the reduction in capture had a positive effect on human development, by increasing school enrollment and student test scores. Information has also been found to have a positive impact on healthcare. Following a randomized field experiment in Uganda, Bjorkman and Svensson (2009) show that providing citizens with information about the quality of public service provision increases their ability to hold local government

agents accountable, thereby improving the quality of local health services - their results show that information leads to significant reductions in child mortality and increases in child weight. This reinforces and builds upon the finding by Wantchekon and Vermeersch (2009), that media exposure increases citizens' demand for public goods.

Although the literature is admittedly limited, there is thus some evidence that access to information does indeed increase accountability, and that this in turn is beneficial to human development. Furthermore, Keefer (2007) has shown that younger democracies, which are assumed to be less credible, provide fewer public goods than older, more established democratic systems. This suggests that credibility might also matter for realizing the potential benefits of democracy. Although measuring credibility is admittedly much harder than measuring information, future work on this subject would be incredibly useful. What the work discussed above also suggests is the importance of participation. Not only is information crucial in enabling individuals to participate in holding politicians and officials to account, but higher levels of political participation have been found to increase public goods provision, and thus encourage human development (Besley and Burgess (2002); Chowdhury (2004)). In a related work, Avritzer (2009) argues that the development of participatory institutions in Brazil has led to greater redistribution of public goods. Therefore given the potential for participation to improve human development, this would also appear to be fertile ground for future research.

6 Conclusions

Human development is about giving people choices. It is about allowing them to lead long and healthy lives, to acquire knowledge, and to gain access to the resources necessary for a decent standard of living. And even more than that, it is about enabling them to make use of these capabilities to improve the quality of their lives. Income is certainly part of this, but education and

health are also vital. Moreover, as Gray and Purser (2010) have shown, these three elements of human development are quite clearly distinct. With this recognition in mind, in this paper we have sought to summarize what we know about the causes and consequences of human development. Having done so, we offer the following conclusions.

Political institutions matter. Specifically, human development is higher under democracy. Although total economic growth is no faster in democracies, democracy has a positive impact on per capita income, which is what matters for human development. And importantly, democracy is not itself caused by economic growth; although democracy is more likely to survive in rich countries than in poor ones, there is no evidence that it is more likely to be conceived in these conditions. Democratic political institutions also have a positive effect on education and health, and again there is no conclusive evidence that democracy is endogenous. Whether measured as enrolment rates, literacy levels, or government spending, as life expectancy, infant mortality, or childbirth survival, democracy is good for human development.

Political institutions matter because they provide structures of accountability. The most convincing explanations for why democracy benefits human development focus on the ability of citizens to hold politicians to account through competitive elections. These institutions thus generate incentives for politicians to broaden the provision of public goods, thereby increasing education, health, and living standards. That informal accountability structures in nondemocratic China also have a positive impact on public goods lends further weight to the claim that what matters about democracy is accountability.

Political institutions provide the opportunities for development, but these opportunities can be missed. Politicians can react to electoral incentives by engaging in clientelism, providing private rather than public goods, or by pursuing policies to further their own interests rather than maximize human development. While democratic elections provide structures of accountability that can

avoid this, the extent to which this accountability is realized depends on other factors. For example, citizens need information about the performance of politicians and officials if these individuals are to be held accountable. Where such information is available, we see higher levels of human development. Information also facilitates participation, which itself has a positive effect on human development.

These conclusions are important, but they are only a starting point. We need to continue investigating the causes and consequences of human development, in order that we can learn how to maximize the positive potential of democracy. Do some types of democratic institutions provide more accountability than others? What factors have the biggest impact on accountability? If information matters, when and where does it matter most? And, what kind of information is most effective? Likewise, if participation matters do some forms of participation have more positive effects than others? And as has been suggested, does credibility matter? These are just a few of the questions that need to be asked if we are to fully understand the determinants of human development.

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