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**The Ease of Doing Business Rank:
An Assessment of its Macroeconomic Relevance**

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Abstract

This paper examines the macroeconomic impact of World Bank's Ease of Doing Business (EDB) rank, of increasing importance to policy makers, using simple but robust cross-country regressions. Its main findings are first that GDP per capita is negatively correlated with the EDB rank. Second, that average growth over a ten year period is negatively related to starting per capita income. It points to broad evidence linking these correlations to labour supply factors. Overall, it shows the EDB rank to have limited macroeconomic usefulness and relevance.

Keywords: Ease of Doing Business Rank, Hernando de Soto, GDP Growth, Convergence

JEL Classification: E2, E66, O17, O43, O47

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Section 1: Introduction

In recent years, the ease of doing business (EDB) rank has become one of the most widely watched and discussed statistic in Indian policy economic policy circles and more so in India over the last year. It is often been cited by Prime Minister Modi after he was elected in May 2014. More crucially he has stressed his goal of raising India's ranking to within the top 50. Ensuring sustainable growth stays high and above 8% has become one of the goals of top policymakers in many countries. A better EDB rank is seen as a critical factor in achieving this goal.

Undoubtedly identifying the sustainable GDP growth rate is a crucial matter for the central bank, finance ministry and other policy makers, and enormous time and effort is devoted in estimating it. Given the enormous attention paid to the EDB rank now a days, it is worth assessing whether it affects potential (or sustainable) GDP growth and/or affects actual GDP growth in a given year. This paper provides such a broad macroeconomic assessment.¹

Section 2 outlines and elucidates an alternative approach to potential GDP growth or Aggregate Supply, or what can be called 'Sotonomics,' in contrast to the conventional Solownomics.' Section 3 discusses the data that go into constructing the EDB rank and presents some basic data for the year 2013 for four countries, viz., Brazil, China, India and USA. Section 4 uses simple but robust cross-country regressions to establish connections between EDB rank, per capita income and growth rate. The results overall suggest that the macroeconomic usefulness of the EDB rank is limited. Section 5 broadly relates our findings to the convergence literature on growth. Section 6 evaluates the limitations of the EDB rank based on the recently highlighted difference between *de facto* versus *de jure* business practices. Section 7 concludes with a discussion of important structural determinants of growth related to governance, other than ease of doing business.

¹ This paper is based on and partly comprises the section, 'An Alternate Approach to Aggregate Supply,' from Chapter 2 of the first author's book, "Applied Macroeconomics: Employment, Growth and Inflation."

Section 2: An Alternative Approach to Aggregate Supply

The conventional approach to the determinants of sustainable growth is the Solow growth model. Like the Harrod-Domar model the Solow model also implies that increases in savings and thereby investment and capital stock will push up growth. However, the Solow model is comprehensive, since it takes into account the contribution of all factors: labour, capital stock and technology. Nevertheless, it is formulaic. It is mainly an after the fact decomposition of the growth contributions of different factors. By itself, the Solow model does not offer much insight as to the policies leading to economic growth and prosperity.

This alternative new approach discussed in this section is not formulaic. It instead tries to identify the underlying policies that lead to growth. It focuses upon property rights in general and, more specifically, on the ease of doing business (EDB). Henceforth this phrase will often be used and called EDB. This EDB approach can be said to be pioneered by Hernando de Soto, the path breaking Peruvian thinker and social entrepreneur. In his first book, *The Other Path* (1989), he argued that the Peruvian economy could grow rapidly if procedures for business could be reduced and streamlined, especially for the informal sector. In this book *The Other Path*, de Soto calculated and documented the number of days and the number of procedures that it takes to carry out specific activities, such as registering a business, getting a construction permit etc.² To categorize his approach and give him credit, it can be called “Sotovian,” as distinct from “Solowian.” By contrast, what is here called Solowian can be described as the analysis of growth using the Solow framework and further the Solow growth model.³

² For interested readers, *The Other Path* (2001) outlines the various steps for setting up a minibus company (Pg 149-150, 2nd edition).

³ Note that in discussions along Sotovian lines, the phrase “institutions” and “governance” are increasingly used to define broader aspects of the rule of law, incorporating interaction between the legal system, private individuals and the government.

At one level, this Sotovian approach, rooted in classical economics, is mere common sense. The emphasis on property rights and rule of law is central to the Chicago School of thought and Milton Friedman. It dates back to Adam Smith, the founder of economics. Well prior to his classic *The Wealth of Nations* in 1776, which documented and analyzed the impact of free markets, Adam Smith wrote,

“Little else is requisite to carry a state to the highest degree of opulence from the lowest barbarism but peace, easy taxes and a tolerable administration of justice; all the rest being brought about by the natural course of things.”⁴

The simplest evidence in favour of this approach can be seen by just comparing which countries are poor and rich. Countries that have been free market economies with rule of law and well defined private property rights, such as the OECD countries, have high per capita incomes.⁵ By contrast, socialist and mixed economies have been poor until recently. The comparison of two former countries split up after World War II into free market and Communist regions provides a valuable natural experiment: West Germany prospered relative to East Germany after they were broken in 1945 and had to put up the Berlin Wall to restrict entry from the East. Similarly, South Korea prospered relative to communist North Korea which has even had famines on some occasions.

The watershed year for India was 1991, when it liberalised and de-licensed its heavily controlled mixed economy. After that, the ease of doing business went up sharply, and so did real GDP growth after an initial crisis period of a few years. From 1970 to 1991 growth averaged 4.3%, while from 1992 to 2013 it averaged 6.6%. Similarly, growth surged for other emerging economies that adopted free market policies from late 1980s onwards.

⁴ In his lectures on Jurisprudence, Smith stated that the very purpose of Government was to “give each one the secure and peaceable possession of his own property.” These citations from Smith are from Irwin (2014).

⁵ OECD stands for Organisation for Economic Cooperation and Development. Earlier it comprised advanced economies: largely European, but also USA, Canada and Japan etc. Entrants to OECD after 2010 are Israel, Chile, Estonia and Slovenia. It has over 30 members now.

This section is about how rule of law and ease of doing business affect growth. More specifically, how can the rule of law and improved EDB affect the GDP growth contributions of the three contributors to growth in the Solow (1957) framework: Total Factor Productivity (TFP), labour and capital respectively?

First, with regard to TFP, the property rights approach implies that implementing stringent Intellectual Property Right (IPR) laws and patent protection will facilitate innovation and new products and processes. The Indian pharma and software industries have not been able to innovate as much as in say USA due to lack of stringent patent laws to protect them.⁶

Second, with regard to labour supply (not just wage labour but more so self-employed persons and entrepreneurs), it is obvious that individuals have incentives to work harder and produce more when they are guaranteed “the fruits of their labour,” to use a classic phrase. This is a very obvious phenomenon but still needs to be stressed. Where there is risk of expropriation of property or income by the State or extortion by gangs, then labour supply especially that of entrepreneurs will not be forthcoming. When the rich may get kidnapped, there is not much incentive to try to become rich. This is the case in many poorer economies, such as de Soto’s native country, Peru, in Latin America, a region with a long history of violence and a lack of law and order. If tax rates are too high, that is also likely to reduce labour supply.

Third, let us consider capital stock. In his second book “The Mystery of Capital: Why Capitalism Triumphs in the West And Fails Everywhere Else,” de Soto (2000) goes above standard rule of law considerations to emphasize, and explain, why clear title to land and real estate (*Khatha* in Hindi) is vital for capital accumulation. Mapping areas and creating land records is very important. Further, what seems to be a trivial factor – the existence of postal addresses – is crucial for

⁶ To cite from the World Development Report 2005, “farmers in Thailand with secure rights invested so much more in their land that their output was 14 to 25% higher than those working untitled land of the same quality.” (Chapter 4, overview page 2)

economic growth. Such addresses may not be available in urban slums and rural areas but are necessary for metered connections of water and electricity. Metering will ensure that users can be accurately billed for payment and connections shut off for non-payment. Merely setting electricity and water prices at commercially viable levels without subsidies -- i.e., the standard World Bank recommendation for decades of "get the prices right," -- is not enough. The legal infrastructure to enforce payment is more crucial. In a book review of the "The Mystery of Capital," Moorthy (2002) discusses the economic value of postal addresses.⁷

Similarly the existence of bank accounts will facilitate risk free saving, unlike say gold, which can be stolen. Banks will make loans to those who can use their property as collateral, i.e., those who have clear title.⁸ This Sotovian approach is vastly different from the conventional approach, in which raising the savings rate was seen as the critical condition for growth. In a classic paper from orthodox development economics, Arthur Lewis (1954) (who was later awarded the Nobel in economics!) had stated,

"The central problem in the theory of economic development is to understand the process by which a community which was previously saving and investing 4 or 5% of its national income or less, converts itself into an economy where voluntary saving is running at about 12 to 15% of national income or more."

In terms of the Harrod-Domar formula, growth rate can be tripled by raising the savings rate from 5% to 15%. But there is no sound policy recommendation as to how this can happen. From a Sotovian perspective, when there is clear title to land, the higher savings needed to finance capital

⁷ Even prior to the publication of *Mystery of Capital*, Moorthy (1999) had written, "merely attracting foreign capital will not ensure more infrastructures." Without the ability to enforce payment for say, electricity, there is no effective demand. The term transmission and distribution (T & D) losses in electricity has been jokingly referred to as "Theft and Dacoity" losses. Informative data on T & D losses in power sector is provided for a few emerging economies, among which India has among the highest losses is provided in Arvind Subramanian (2008, Pg. 116)

⁸ Identification tied to payment systems, such as America's Social Security card, and e-governance initiatives, such as the Aadhar card in India, are facilitating more transactions and exchange, and thereby raising growth.

accumulation will somehow be forthcoming.⁹ There is no need to offer special fiscal incentives to attract foreign capital. The higher savings will show up in the formula as the variable leading to higher growth.

Section 3: The Ease of Doing Business Survey

Following de Soto's lead, the World Bank started measuring the ease of doing business. Its 2004 publication, "Doing Business," extended to 145 countries what it called de Soto's "time and motion studies" for Peru. That has evolved into a full-fledged wide ranging survey of different countries, now called the Ease of Doing Business Survey, or EDB Survey. The number of days and procedures for the following activities are separately recorded for: (i) Starting a Business (ii) Dealing with Construction Permits (iii) Getting Electricity (iv) Registering a Property (v) Paying Taxes (vi) Enforcing Contracts. A reduction in the number of days and/or number of procedures obviously increases the ease of doing business and pushes up GDP growth.

With regard to the choice of capital versus labour intensive techniques in manufacturing, the EDB approach implies that liberal firing rules for businesses will encourage labour intensive manufacturing, far more than the wage/rental price of capital ratio as in the Solow model.

Apart from its survey estimates of number of days and procedures for various activities, the World Bank's annual EDB survey reports a rank of the strength of investor protection and an overall EDB rank. This overall Rank is watched very closely and discussed by economists and politicians. All these data are reported in the Table 1 for 2013 for four countries: three large emerging

⁹ For a discussion of impact of such Sotovian policies versus tax concessions on savings, and the associated policy recommendation of cash bonuses for opening bank accounts for the poor, see Moorthy (2001). The Jan Dhan scheme is a huge push to open bank accounts in India in 2015. This Section 2 draws upon Appendix II, 'Law and Order versus Savings as Determinants of Growth' in this 2001 article.

economies, Brazil, China and India and USA – the largest developed economy, and the benchmark for other comparisons.¹⁰

Table 1 Components of the Ease of Doing Business Survey

	Brazil	China	India	USA
Starting A Business				
Number of Procedures	13	13	12	6
Number of Days	119	33	27	5
Dealing with Construction Permits				
Number of Days	430	276	168	91
Getting Electricity				
Number of Days	58	145	67	60
Registering Property				
Number of Procedures	14	4	5	4
Number of Days	30.5	29	44	12
Paying Taxes				
Number of Hours per Year	2600	338	243	175
Total Tax Rate (% profit)	68.5	63.7	62.8	46.4
Enforcing Contracts				
Number of Procedures	44	37	46	32
Number of Days	731	406	1420	370
Resolving Insolvency				
Number of Years	4	1.7	4.3	1.5
Strength of investor protection index (0-10)	5.3	5	6.3	8.3
GDP Per Capita 2013 (in US \$)	11,359	6,071	1,501	51,704
GDP Per Capita 2004 (in US \$)	3660.88	1493.79	657.52	41838.45
GDP Growth for 2013	0.9	7.7	3.2	2.8
Average Growth (2004-2013)	3.5	10.2	7.4	1.8
(Overall) Ease of Doing Business Rank for 2013	118	99	131	4

Source: The following data for 2013 were taken from the World Bank's 2014 Doing Business Survey and GDP database.

To begin with, the first thing to note about this Rank is that it measures the relative, and not the absolute Ease of Doing Business. The latter would be captured by the actual number of procedures and number of days for the various activities that go into running a business. Also note that a numerically lower Rank implies a greater EDB. In 2013 when USA was ranked four, Singapore was ranked one.

¹⁰ Initially the idea was just to compare India and China with USA as a benchmark developed country. Since Brazil is also a large emerging economy, it was added for comparison. Although Russia is part of the BRICS group, since its per capita income is much higher and to keep things simple it was left out.

Consider the first item. Specifically, for 2013 the number of days to start a business is reported as 33 for China and 27 for India. When the Survey was started in 2004, this was reported as 88 days for India and 49 for China. This stylized fact had been often cited to suggest why China grows faster than India. However as the Table indicates there are other criteria on which India scores better than China, such as getting electricity (67 versus 145 days) and dealing with construction permits (168 versus 276 days). Where India fares badly is in the legal realm. It took 1420 days on average for India to enforce a contract versus 406 for China, and 4.3 years to resolve insolvency versus 1.7 for China. From this approach, improving “legal infrastructure” is the critical factor for growth.¹¹

India has been streamlining its procedures and hence the number of days has come down. From 2004 to 2013, India’s absolute EDB has improved greatly: the number of days to start a business has fallen from 88 to 27, while for China it has fallen from 49 to 33 days. However, China’s overall rank is 99 against 131 for India, i.e., India’s relative EDB has not improved.

Section 4: Links between Output and Ease of Doing Business

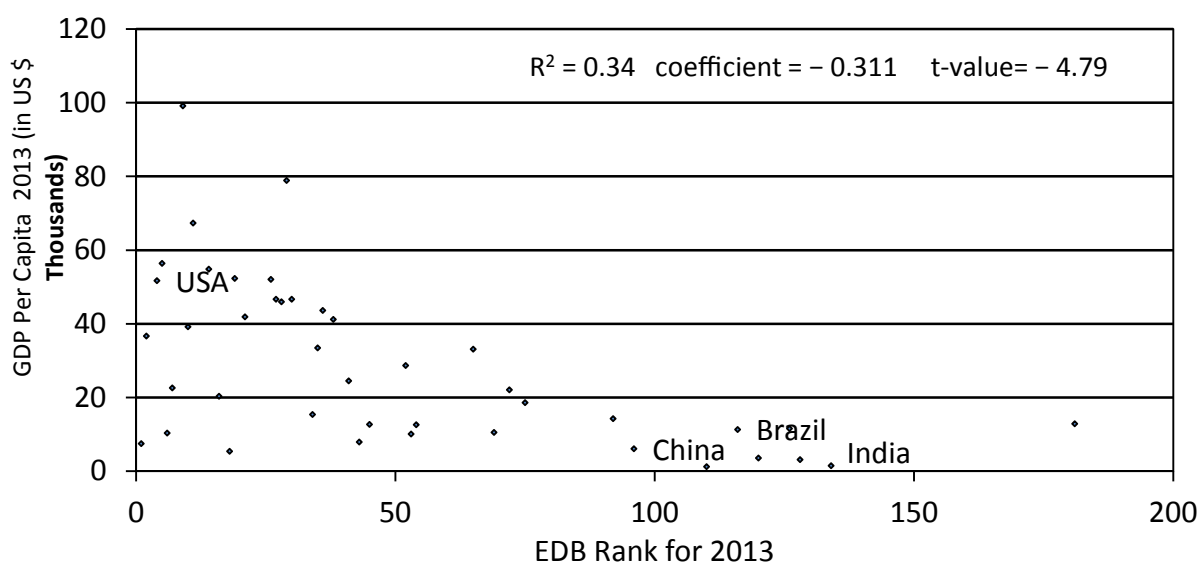
We should note that in any given year the growth rate of a country may be unrelated to EDB conditions. In the table above, Brazil has the lowest growth of the four in 2013 since it was in recession. Hence, we should be looking at growth over a longer period which is likely to broadly correspond to potential GDP growth. Let us look at the ten year period ending 2013. For this ten year period, in this Table USA with the best EDB ranking of the four has the highest per capita income but also the lowest average growth rate. To try and arrive at some definitive conclusions, we need to examine these connections for a much larger sample of countries.

¹¹ As of January 2015 there were 3 crore total cases pending in India which has a very low judge to population ratio (about 10 to 1 million versus 150 for Europe and 100 for USA). There were 40 lakh bounced check cases as of April 2015. Spending on legal infrastructure, increasing the number of judges and setting up fast-track commercial courts and relying more on arbitration are policies that will be very beneficial. See Bhan (2015).

The full Table 3 at the end of the text provides relevant data for all the 42 countries listed in the back data pages of the Economist magazine. These are all reasonably big and/or developed countries whose quality of data is usually adequate to be worth examining.¹² Based on the Table three scatter plots are presented below. What do these plots indicate?

First, per capita income is positively correlated with greater EDB, as can be seen in Figure 1. The full results for this and following regressions are all presented in Table 4 at the end of the text.

Figure 1 Ease of Doing Business and Income Levels



Note: A lower rank implies a greater ease of doing business.

Second, average growth rate is negatively correlated with per capita income, as shown in Figure 2 and corresponding to Regression 2. Third, average GDP growth is negatively correlated with greater EDB, as shown in Figure 3 and corresponding to Regression 3. It should be emphasized that countries with better or higher or greater EDB have a numerically lower rank. So the correlation in the scatter plot between EDB index and per capita income is negative, not positive.

These three scatter plots support the simple evidence in the Table 1, comparing USA with the three big emerging economies combined as a group. The US has a higher per capita income,

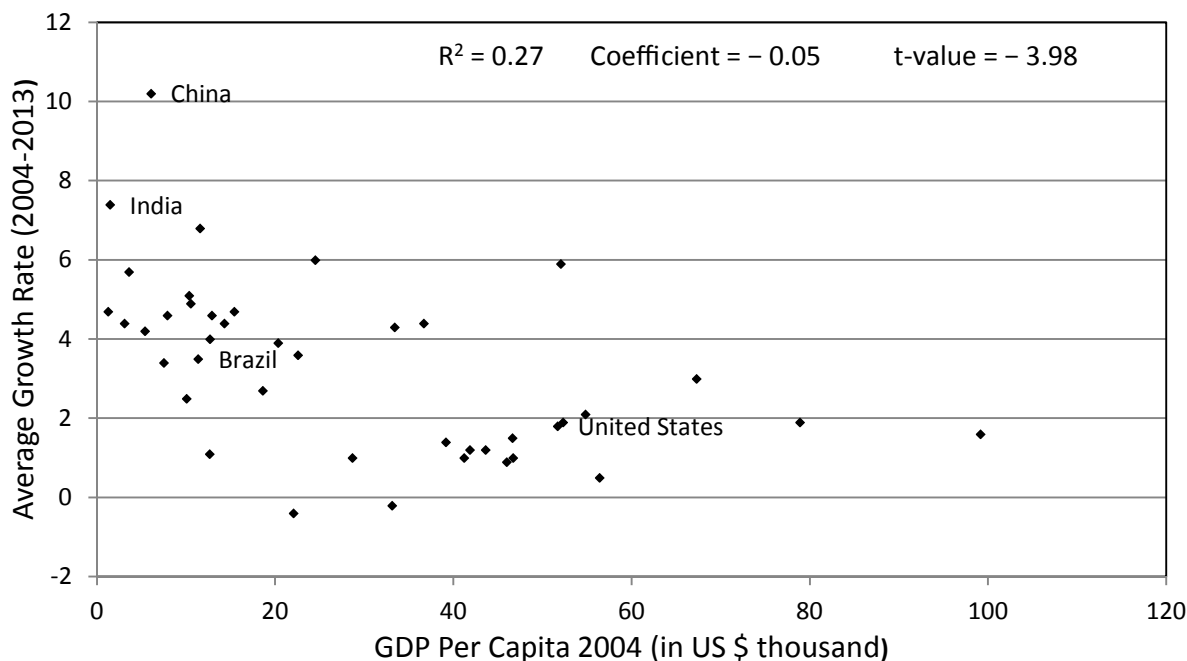
¹² This Table and some results are taken from the CCS Project of Snehal Gajbhiye (2015), IIM Bangalore.

lower growth rate and a much better EDB rank (4th in the world), well above India (131), China (99) and Brazil (118). We shall try and provide some explanation for these links using regressions, keeping in mind that these are complex issues and there is scope for two way causality.

To begin with, why are rich countries (those with high per capita income) rich? Let us consider the first regression result: impact of EDB rank on per capita income. This can be explained as follows. Countries with rule of law and greater ease of doing business, have prospered and developed over decades and even centuries, and this has resulted in a high per capita income. Their ease of doing business is high and their EDB rank is also high. The World Economic Forum publishes an index of competitiveness which also has a high correlation with per capita income.¹³

Let us consider the second (negative) correlation between per capita income and average growth.

Figure 2 Output Per Capita and Average Growth



Even before analysing this, we should note that at the individual company level, starting from a low base, growth of sales is high: an arithmetic effect. Once the level of sales is high, growth then

¹³ There is also a high correlation between an index measuring the degree of protection from expropriation and the log of GDP per capita, as shown by Acemoglu (2004).

tends to slowdown. The same logic applies to GDP per capita, the all sales of all the firms, adjusted for population.

For the economy as a whole, there are other factors at work beyond the “high base” that will reduce growth when the level of income is high. When a country reaches a high income level, certain social changes take place. At high per capita income levels, population growth tends to be lower. Without getting into demographic explanations, for various reasons people tend to have smaller families. Hence population, labour force and labour supply growth all tend to be lower.

It is worth noting that among rich countries, the ones that allow high immigration (USA, Canada and Australia) have higher population and labour supply growth and thereby higher GDP growth than those with less immigration (European countries and Japan). Both USA and Canada have higher growth rates compared to Japan and Germany, a big and representative European country. For the ten year period, both USA and Canada have GDP growth about a percentage point higher than Germany and Japan. Their population growth is also about a percentage point higher, as can be seen in the Table 2 below.

Table 2 Average Output and Population Growth in Select Developed Countries

Economy	GDP Per Capita (US \$) for 2013	Average growth (2004-2013)	Population Growth
Canada	52,300	1.9	0.94
United States	51,704	1.8	0.78
Germany	41,866	1.2	-0.23
Japan	46,707	1	-0.03

Source: World Bank data and author’s calculations.

To summarize, other things equal, higher population growth raises GDP growth.

Another crucial factor is that in rich countries, average hours of work per worker is usually lower than in emerging economies. This is partly because of legislation, such as the US Fair Labor Standards Act of 1938 that put a 40 hour cap on the workweek, with higher wage rate for overtime beyond 40 hours. Western European countries also have stiff legislation with respect to

caps on hours of work. Legislation apart, a growing number of workers in rich countries choose part time jobs, return to education for advanced degrees, and/or or drop out of the paid labour force to stay at home. The US labour force participation rate peaked at around 67% during the dotcom boon and has fallen in recent years to 63% in 2014. Hence hours worked and also GDP growth falls.¹⁴ Thus through both choices of individuals and legislation by government, labour supply and hence GDP growth is lower in developed compared to emerging economies.

We should discuss growth from another angle that is often used to explain why rich countries slow down. From a sales or business point of view, developed economies with high per capita incomes have relatively saturated markets. Specifically, to take consumer durables, car and Personal Computer (PC) ownership are close to full market penetration and hence there is hence not much scope for growth. By contrast, say in India, the scope for higher car and PC ownership is high, although as of 2015; mobile phone ownership is getting close to saturation.¹⁵

In a 'saturated' market for cars, growth has to come from replacement demand, which depends on the age of the vehicle stock and their depreciation rate. However, growth can be boosted by inducing consumers to buy new models with improved features, thereby scrapping their old cars well before they depreciated. No economy is ever saturated as long as new products come into the market or customers like to frequently replace existing products with new, higher value models, and have the income to purchase them.

Hence, spending and so GDP can grow as consumers upgrade to fancier models even without a fundamentally new car. Therefore, one can conclude that labour supply, which simultaneously provides consumers the income to buy new products, is the more fundamental determinant of GDP growth. However, from a consumer demand perspective it is also the case that rich mature

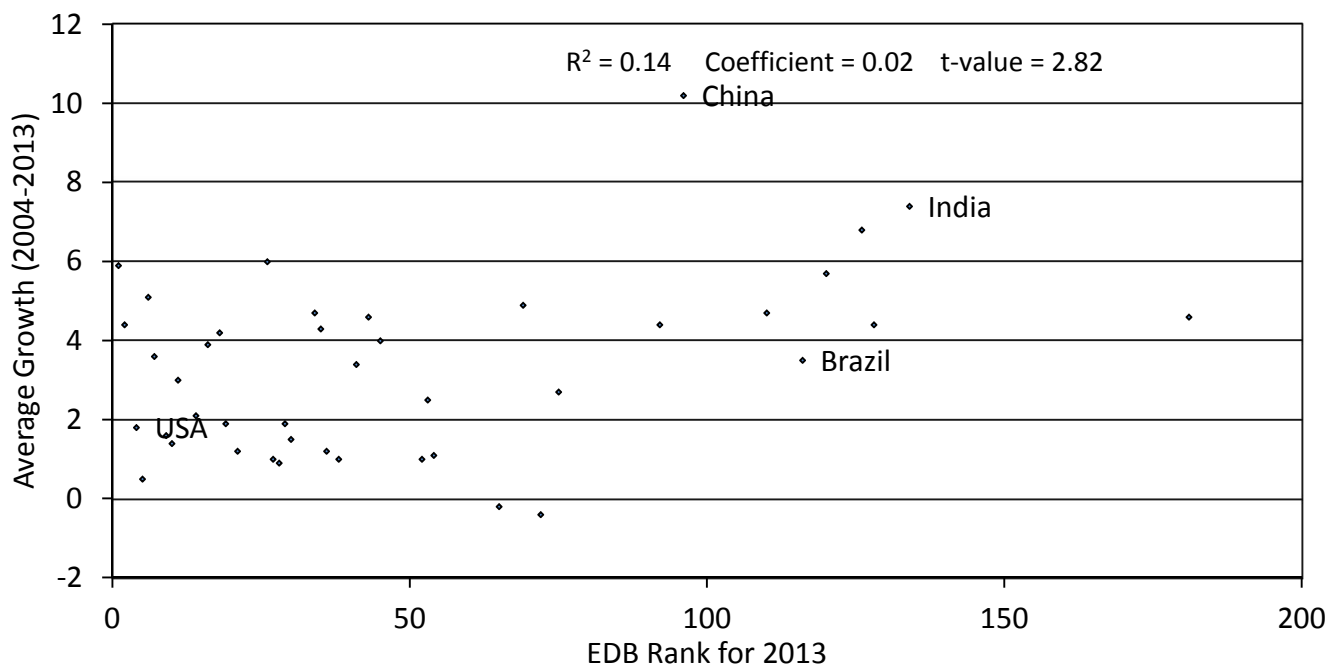
¹⁴ At the other extreme, at very low levels of income, as the economy gets monetized and/or women enter the labour force from the subsistence or unpaid sector, GDP growth can rise with higher labour supply.

¹⁵ Mobile subscription in 2007 in India was 230 million. It was growing at about 100m a year whereas by 2011 the subscriber base was almost stagnant at 900m. The density of mobile subscribers per 100 persons which was 0.19 in 2000 had risen to 22.81 in 2007, over a hundred fold increase.

economies are perhaps somewhat saturated compared to emerging economies. It is harder for them to find new products for growth, and hence this contributes to their lower growth.

The third correlation (between average GDP growth and EDB rank) is related to the above two.

Figure 3 Ease of Doing Business and Average Growth



It indirectly reflects the correlation between EDB and per capita income. Rich countries are those that reached their state with a greater EDB for decades. Simultaneously, rich economies have high per capita income and so have low growth. The third correlation follows from the other two.

To isolate the separate effects of EDB rank and per capita income on growth, a multiple regression with both variables is needed. When GDP per capita is also an explanatory variable, there is no statistically significant favourable impact of EDB on growth, as can be seen in Regression 5.

It must be kept in mind that the EDB rank is a relative ranking. There is no overall absolute Index reported. Strictly speaking, the absolute values of number of days, etc., should have an impact on growth, not the rank per se. However, the absolute number of days is correlated with the rank. Hence the latter can be used as a proxy for the former. Further, the rank can have second round effects: the country with the better rank will attract more investment compared to others, which

will boost its growth. Indeed, the EDB ranking is correlated with the global competitiveness index brought out by the World Economic Forum. To attract more foreign investment, many countries are aggressively trying to boost their EDB ranking.

Another noteworthy aspect of the EDB data is that the number of procedures, number of days, rankings, etc., and the overall EDB rank often barely changes from year to year, although the annual growth rate fluctuates a lot. The regression of growth in 2013 on its 2013 EDB is insignificant as can be seen in Regression 4. This implies that the EDB index cannot explain cyclical fluctuations. For macroeconomic analysis we should think of EDB as a background factor affecting potential GDP growth but not actual GDP growth. This is an important conclusion.

In this connection a short discussion of recent developments pertaining to India is warranted. After the sweeping victory of the highly pro-business regime of Prime Minister Modi in May 2014, expectations have been widespread that the EDB rank will rise a lot and that growth will pick up. Regarding the former, this has not been the case. For the year 2013, 2104 and 2015 (i.e., Doing Business surveys of 2014, 2015 and 2016) the rank has been 131 (shown in Table 1) followed by 134 for 2014 and then a small but highly noticed improvement to 130 for 2015. (Since the results are meant to correspond to the situation as of June, the policies of Modi would be relevant only for 2015). It is unlikely that India will meet the target of raising its rank to 50 that he has set. As for the impact on GDP growth of an improvement in India's rank, that is harder to ascertain due to continuing and growing uncertainty over India's GDP data revisions since 2015 showing much higher growth (for instance, see Nagaraj, 2015).

Section 4.1: Summary of Our Findings

To summarize our examination of the data, countries with a greater EDB rank generally have a high per capita income. At the same time, countries with a better EDB rank tend to have high per capita income and low growth. Growth tends to be high in those economies that started from a low

base and have liberalized hugely in recent years, even though their EDB rank is low, such as China, India and other emerging economies.

The main conclusions of this paper are as follows: (i) well-defined property rights as captured by the EDB rank are essential for economic progress and result in high per capita income, as can be seen in Figure 1. This is in contrast to the conventional approach in which the savings rate is seen as critical for growth. (ii) However a high per capita income leads to a reduction in labour supply that slows down growth, as seen in Figure 2. The EDB rank does not affect growth in the current year. Countries with low EDB ranking have high growth, but this likely reflects the negative impact of high per capita income on labour supply etc.

Section 5: Broad Confirmation of the Convergence Hypothesis

The links between growth and per capita income have been analyzed in a pioneering article by Barro and Martin (1992) and many of their subsequent writings. For the 52 states of America they found a strong negative correlation between the starting level of per capita income in year 1880 and the per capita growth rate from 1880 to 1988. Since this period is over a century, this is a robust result.¹⁶ They use their results to support the convergence hypothesis, which follows from the Solow growth model, i.e., the standard of living of poorer regions or countries will converge to that of richer countries. This result is similar to that in Figure 1. We found a negative link between growth during 2004-2014 and per capita income in 2004.¹⁷

¹⁶ They found the simple correlation to be -0.93 . In a regression of per capita growth rate on the level of per capita income for the States in USA, the coefficient is minus 0.175 and the t-value is 3.80.

¹⁷ To examine convergence more precisely, we should have looked at the per capita growth rate and not the GDP growth rate. But from an overall macro policy point of view, GDP growth is the more important variable and hence the focus of this paper. Replacing it by per capita income growth rate is unlikely to change the basic results.

However when doing a similar test for convergence across countries from 1960 to 1985 they do not find such a negative correlation to be the case. In fact, they found a small negative correlation between per capita income and growth, i.e., rich countries had higher growth during this period.¹⁸

Their result for this period is not at all surprising, but follows from the property rights approach to growth and development emphasized here. Between 1960 and 1985, most countries followed socialist or semi socialist policies and hence their growth was weak. These economies then liberalized in a big way, starting mostly in the early 1990s. Given their low starting level of income, they “took off” and continue to grow rapidly compared to richer countries. What we have emphasized, in sync with their results, is that the level of per capita income and the associated decline in labour supply is the main reason that country with higher EDB rank have lower GDP growth.

Section 6: Recent Critiques of the EDB Survey

Quite recently, the accuracy of EDB rank has been questioned by Driemeier and Pritchett (2015). Their argument is that the EDB rank is a *de jure* measure that does not capture the *de facto* or actual practices that are used to get around the law to get business done: personal connections, *jugaad* solutions. These criticisms have some validity. Further, we need to distinguish between the cost versus ease of doing business. In unorganized economies, where much activity is not taxed or escapes the tax net, the cost of doing business is low, even if starting a business is difficult and the EDB rank is low. This distinction between cost and ease of doing business can explain to some extent why countries with large unorganised sectors and low EDB rank tend to have higher growth. Nevertheless we would stick by our overall conclusion that there is not much reason to find a strong correlation between the EDB rank and growth.

¹⁸ For India prior to liberalization, its poor performance was attributed to the “Hindu” rate of growth. In particular, for India, as its socialist policies ended, its “Hindu” or rather Nehruvian rate of growth also ended.

However, for strategic business and corporate decisions such as where to locate a plant or for where to channelize FDI, the EDB rank may be critical. The proliferation of investment climate surveys for which firms pay to get data implies the importance of the investment climate as a decision input.¹⁹ Some studies, such as Djankov, et al. (2009), have suggested that the EDB rank is a suitable measure to assess the business environment. However, others have come to a different conclusion. In particular, using factor analysis and other techniques, Pinheiro-Alves and Zambujal-Oliveira (2012) find that the EDB rank has “limited consistency and descriptive power of the business environment”. The evidence on the broader relevance of the EDB rank is mixed and warrants investigation from different angles, for business decisions.

Section 7: Other important determinants of growth

Over and above the ease of doing business, there are important determinants of long term growth related to governance and institutions. One such is political stability, which impacts business sentiment and investor confidence, for a given EDB rank. It is beyond our domain to examine this issue. One aspect of this issue is whether democracy or dictatorship is more conducive to growth, on which there is no clear consensus. Within democracies, a commonsensical conclusion is that too frequent elections and possible changes of regime are bad for business. A political system where the elected party, whether or not it is pro-business, is required to stay in office for its full term (typically four to five years) is more conducive to stability and thereby growth than one where fresh elections can be called frequently, as say in India. Similarly, the staggering of local, State and Central elections such that elections are being held all the time somewhere, as in India, even though each term may be five years, is bad for business. Finally a longer term (number of years) for crucial political or administrative appointments and senior bureaucrats etc. is conducive

¹⁹ Even way back in 2005, the World Bank had listed 12 such investment climate series in its Doing Business survey. Five of these are as follows: Business Risk Service (Business Environment Risk Intelligence), Country Credit Ratings (Euromoney Institutional Investor), Country Risk Indicators (World Markets Research Center), Country Risk Service (Economist Intelligence Unit) and Economic Freedom of the World (Fraser Institute).

for good economic performance. These important factors need to be investigated in comparison to the EDB rank which has received too much attention.

Table 3 The Ease of Doing Business Survey Ranking and Related GDP Data

Country	Ease of Doing Business Rank	GDP Per Capita 2013	GDP Growth 2013	Average growth (2004-2013)
United States	4	51,704	2.8	1.8
China	96	6,071	7.7	10.2
Japan	27	46,707	2.0	1.0
United Kingdom	10	39,161	0.2	1.4
Canada	19	52,300	1.7	1.9
Austria	30	46,643	0.9	1.5
Belgium	36	43,615	-0.3	1.2
France	38	41,223	0.0	1.0
Germany	21	41,866	0.9	1.2
Greece	72	22,072	-6.4	-0.4
Italy	65	33,115	-2.4	-0.2
Netherlands	28	46,011	-1.2	0.9
Spain	52	28,670	-1.6	1.0
Czech Republic	75	18,624	-1.2	2.7
Denmark	5	56,426	-0.4	0.5
Hungary	54	12,652	-1.7	1.1
Norway	9	99,170	3.0	1.6
Poland	45	12,709	1.9	4.0
Russian Federation	92	14,302	3.4	4.4
Sweden	14	54,815	1.0	2.1
Switzerland	29	78,881	1.0	1.9
Turkey	69	10,527	2.2	4.9
Australia	11	67,304	3.7	3.0
Hong Kong SAR, China	2	36,676	1.5	4.4
India	134	1,501	3.2	7.4
Indonesia	120	3,594	6.2	5.7
Malaysia	6	10,345	5.6	5.1
Pakistan	110	1,261	4.4	4.7
Singapore	1	52,052	1.3	5.9
Korea, Rep.	7	22,589	2.0	3.6
Taiwan, China	16	20,336	1.3	3.9
Thailand	18	5,390	6.5	4.2
Argentina	126	11,582	1.9	6.8
Brazil	116	11,359	0.9	3.5
Chile	34	15,410	5.6	4.7
Colombia	43	7,919	3.7	4.6
Mexico	53	10,059	3.6	2.5
Venezuela, RB	181	12,918	5.6	4.6
Egypt, Arab Rep.	128	3,112	2.2	4.4
Israel	35	33,433	3.4	4.3
Saudi Arabia	26	24,524	5.1	6.0
South Africa	41	7,525	2.5	3.4

Source: Ease of Doing Business Survey 2014, World Bank and IMF World Economic Outlook Database. Those countries in the Economist magazine data pages (recent issue) at the back were chosen.

Table 4 Regression Results

	Dependent Variable	Adj. R²	Intercept	Independent Variables	
1	GDP Per Capita 2013 (in thousand US \$)	0.31	43.63 (9.80)*	EDB Rank 2013 – 0.29 (– 4.39)**	
2	Average Growth (2004-2013)	0.45	5.1 (12.6)*	GDP Per Capita 2004 (in thousand US \$) – 0.09 (– 5.85)**	
3	Average Growth (2004-2013)	0.17	2.2 (4.64)*	EDB Rank 2013 0.02 (3.03)**	
4	GDP Growth 2013	0.003	1.48 (2.33)**	EDB Rank 2013 0.01 (1.01)	
5	Average Growth (2004-2013)	0.27	4.01 (4.89)*	GDP Per Capita 2013 (in thousand US \$) – 0.04 (– 2.61)**	EDB Rank 2013 0.009 (1.17)

T-values in parentheses. ** denotes significantly different from zero at the 1% level, * at the 5% level.

Based on data in Table 3. Number of countries in sample is 42. Taiwan is excluded from regressions with average growth and/or GDP per capita as a variable due to lack of data for earlier years (it does not feature in regular World Bank and IMF Tables since it is excluded from IMF membership) although data for 2013 is provided.

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