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Questioning the Claim that Freer Markets Make Societies More Prosperous

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Abstract

A conventional reading of economic history implies that free market reforms rescued the world's economies from stagnancy during the 1970s and 1980s. I reexamine a well-established econometric literature linking economic freedom to growth, and argue that their positive findings hinge on two problems: conceptual conflation and ahistoricity. When these criticisms are taken seriously, a very different view of the historical record emerges. There does not appear to be enduring relationship between economic liberalism and growth. Much of the observed relationship between these two variables involves a one-shot transition to freer markets around the Cold War's end. Several concurrent changes took place in this historical context, and it is hasty to conclude that it was market liberalization alone that produced the economic turnaround of the 1990s and early-2000s. I also question market fundamentalists' view that all forms of liberalization are helpful, arguing that the data show little to no benefit from reforms that did not attract foreign investment.

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Analysts often portray "free market" reforms as having saved the world economy from an abyss. During the 1970s and 1980s, countries were widely mired in a combination of economic stagnancy, high inflation, high unemployment and severe systemic financial problems. After the Cold War, the world widely embraced economic liberalization and prospered for nearly two decades. This sequence of events provides a compelling historical case that liberal economies grow faster, as do the many econometric studies that find a statistically-significant relationship between economic growth and "economic freedom." Given this history and econometric evidence, it is not hard to imagine why policy-makers have widely embraced pro-market policies in their efforts to restore growth after the 2008 crisis.

In this paper, I argue that both the historical and econometric case for free markets' pro-growth effects hinge on at least two problematic assumptions: ahistoricity and conceptually-conflated measurements. Taking these criticisms seriously makes the economic liberalism-growth relationship look more tenuous. The late-1980s' transition to market-centric policies occurred in tandem with several other changes, including the Cold War's end, governance changes, Western government-sponsored bailouts of bankrupt developing countries, and a range of other changes that do not involve market liberalization alone. A deeper look at the record suggests the importance of attracting foreign investment, which can – and has – been achieved by illiberal policies. I postulate that those aspects of the neoliberal transition that helped facilitate inward foreign investment, like capital market deregulation and these Western bailouts, helped countries prosper. The data do not suggest that any or all forms of liberalism help spur development because markets are intrinsically better modes of organizing economic activity for the purposes of producing growth. Pro-market reforms that did not directly address this

historically-specific crisis and transition may have had little effect, particularly after the crisis passed.

This insight has implications on post-2008 debates. Much of our post-2008 recovery policy has been shaped by the view that markets are inherently better allocators of economic resources. Market fundamentalists' ability to paint government interventionism as intrinsically wasteful and counter-productive has kept states from aggressively rehabilitating financial markets or engaging in major stimulus. It is worth noting that governments did both during their transition into neoliberalism. Our inability to see the neoliberal transition as involving active government interventions stems in part from our taking neoliberals' self-description as a *laissez-faire* policy movement at face value.

1. Free Market Capitalism and Economic Growth

Economic liberalism is a policy ideology that stresses the necessity or benefit of conferring economic power, decision-making autonomy and wealth to private producers and investors, while discouraging government attempts to administer markets directly. This ideology has helped motivate many long-term global economic changes, including globalization, financialization, privatization, regressive fiscal policies, welfare state cutbacks, and deregulation (Centeno and Cohen 2010, forth.). Many analysts support liberal policies on the grounds that government "interference" in markets harms the economy (Norberg 2003; Sowell 2007, 2008; Gwartney, Stroup, et al. 2010; Laffer, Moore, and Tanous 2009).

These views have influenced economic policy since the 1980s, and have continued to shape policy after the 2008 crisis. Its continuing influence is apparent in governments' reluctance to raise taxes or social spending, engage in larger public investment projects,

nationalize or seriously re-regulate failing financial institutions, or step back from globalization. Our continuing commitment to "free market" policies is indicative of the degree to which neoliberalism's proclaimed commitment to *laissez-faire* has firmly entrenched itself in policy practice. Liberal economic policies are often premised on the idea that markets are intrinsically superior modes of organizing economic activity for the purposes of promoting aggregate growth and stability.

As noted above, the idea that liberal policies spur growth has impressive historical and econometric support. This paper offers a critical examination of an econometric literature linking "economic freedom" to economic growth. It focuses on Gwartney *et al.*'s (2010) *Economic Freedom of the World Index* (EFW), an index that measures countries' conformity to the ideals of "economic freedom". This index garners considerable media attention regularly, and has served as a basis for a reasonable-sized econometric literature linking *laissez-faire* to economic growth (for reviews, see Berggren 2003; De Haan, Lundström, and Sturm 2006).

I argue that the literature linking the EFW to economic growth collectively employs two problematic suppositions that are prevalent among arguments advocating economic *laissez-faire*. The first is the conflation of *laissez-faire* with measures of good governance and macroeconomic performance itself. The second is an ahistorical view of the growth-"freedom" relationship, which does not seriously consider the possibility that this relationship exists only in particular idiosyncratic historical contexts. These assumptions not only help generate strong econometric support for *laissez-faire* policy, but also shape narrative histories of economic policy and development.

1.1 Historical Narrative

Between WWII and the 1980s, the world's economies were governed by policy strategies in which governments played a comparatively active role in shaping the behavior of markets (Ruggie 1982; Centeno and Cohen 2010). These strategies materialized concretely in a wide range of "government interventions" in economic markets: high taxation and spending, active government investment, public ownership of economic enterprises and strategic resources, barriers on international trade and capital exchange, heavy domestic market regulation, high levels of public employment and a rich range of government-sponsored social programs. Mid-century state-managed capitalism produced unprecedented global prosperity, stability and well-being progress during much of the 1950s and 1960s, but these systems fell into chronic recession, inflation, unemployment and systemic financial problems during the 1970s and 1980s.

In the context of these problems, strong intellectual and political movements arose to blame government interventionism itself. "Interventionist" policies - like monetary activism (see Barro 2007 on Milton Friedman), regulationism (Denison 1980) or public investment (e.g., Barro and Sala-i-Martin 1992) – were portrayed as wasteful, counterproductive and unsustainable (for reviews, see Bruton 1998; Easterly 2002). A new "neoliberal" perspective emerged among policy analysts and makers, which viewed the decision-making autonomy of private sector actors a new panacea (Yergin and Stanislaw 2002; Harvey 2005; Centeno and Cohen 2010, forth.). Government policy sought to reinforce markets' control over economic organization, and, paradoxically, intervened in the economy to reinforce this control (Amable 2011). Despite this contradiction, and the continuing durability of many postwar mechanisms of government intervention (Brooks and Manza 2006; Cohen and Centeno 2006), neoliberal reforms were adopted widely and aggressively between the mid-1980s and early-1990s, and were followed by worldwide improvements in growth and inflation containment. Since the mid-1990s, neoliberal

economic reforms have been well-entrenched, and the world's economies generally posted stable and positive growth rates until 2008.

This sequence of historical developments provides the basis of many convincing historical narratives that portray economic liberalization themselves as having *caused* the post-Cold War global prosperity. It glosses over the ways in which newly-unleashed market forces helped create the crises of the 1970s and 1980s. For example, much of the "lost decade" of the 1980s involved public sector solvency problems created by governments' having accumulated massive debts during the 1970s (Sachs 1989). Government profligacy is always remembered, but analysts often forget that these debts required indiscriminate lending by private banks in newly-liberalized international credit markets. Likewise, this basic narrative understates the ways that decisive government action resolved these problems. Policies like those of Reagan, which cut the tax base aggressively without cutting expenditures, amount to a massive stimulus program. Governments continued to maintain high debt loads, but the strains of doing so eased in a looser international credit market (Krippner 2011). Many countries adopted Washington Consensus-type reforms when bundled with Western government-sponsored bailout financing (Edwards 1995; Kolodko 2000:299–301; Dreher 2002; Babb and Carruthers 2008). A country would simultaneously adopt reforms while enjoying credit infusions that relieved the strains of their systemic financial crises. It is hard to say where the effects of the reforms themselves begin, and where the benefits of the bailouts end.

These problems are not fatal to the standard narrative that free market reforms rescued our economies. However, they do suggest that the true story is far from straightforward on the issue of government intervention. History itself cannot close the books on market liberalization reforms, but what about the econometric literature?

1.2 The Econometrics of Economic Freedom

Much of the best-known literature used to support liberal policies focuses on the relationship between growth and these policies' intended consequences (e.g., see Rodríguez and Rodrik 2000 on trade, trade liberalization and growth). While liberalization reforms may help a country create develop large and robust trade, finance or business markets, they are not the only factor that promotes market development. Simply deregulating trade or finance does not automatically create robust trade or capital linkages. Support for neoliberal policy is rather conditional in most corners of the academic economics literature. Surveys of academic economists suggest that orthodox *laissez-faire* attitudes are rare outside of trade policy, and most of them see moderate economic intervention as desirable (Klein and Stern 2007). Moreover, much of the econometric literature focuses on the specific forms of market liberalization, development and growth. They tend not to view *laissez-faire* as a single country characteristic, in contrast to more popular or applied discourses that treat liberalism as generically beneficial or harmful.

It is worth noting that early advocacy for liberalization reforms was not wholly based in a belief in governments' intrinsic fallibility or markets intrinsic superiority for the purposes of pursuing growth. Some advocates, including the often-cited "Washington Consensus" (Williamson 1990), were more firmly oriented towards the resolution of the world system-wide debt crisis that preceded neoliberal reforms (see Sachs 1991). Despite portrayals this Consensus as a raw endorsement of free market reforms writ large, its reforms – fiscal austerity, tax reforms, easing capital market price controls, trade and inward investment liberalization, privatization, deregulation and property rights protection – were not being implied to secure

long-term growth.[1] Likewise, they did not advocate wholesale cutbacks for government programs and power, allowing for education, health care and public infrastructure investment as appropriate subjects of state intervention. Rather, the Consensus was engaging the issue that developing countries' governments were hemorrhaging money and their politicians could not agree on policy changes that would stop the bleed. Potential donor governments and private investors were reluctant to extend new loans to these governments out of fear that, without serious fiscal changes, such loans would be tantamount to pouring money down a black hole. As a result, capital rushed out of the country, governments often had to print money to cover their obligations, and confidence in the financial system was negligible.

The strongest and least conditional advocacy of harder neoliberal positions comes from studies sponsored by conservative-leaning think tanks, like the Heritage Foundation/Wall St. Journal's *Index of Economic Freedom* (Miller and Holmes 2011) or the Frasier Institute's *Economic Freedom of the World* (EFW) (Gwartney, Hall, et al. 2010). Of these two think tank reports, the EFW has been examined most often in scholastic journals, in part because its index is reasonably rigorous and transparent. The literature has widely confirmed a positive relationship between "freedom" and growth (De Haan et al. 2006:172–4 list 17 studies confirming this relationship).

Two Criticisms of the EFW-Based Literature. EFW-based studies that assess the relationship between economic growth and freedom have generally confirmed this relationship using a range of sophisticated regression methods and wide array of controls. At first glance,

[1] "Dornbusch … has recently raised the question of whether the Washington agenda described above can be relied on to restore growth once stabilization has been achieved. He points to the disappointing experiences of Bolivia and Mexico, where determined and effective stabilization has not yet resulted in a resumption of growth. If he is right in his contention that entrepreneurs may adopt a wait-and-see policy after stabilization rather than promptly committing themselves to the risks involved in new investment, the important question arises as to what must be added to Washington's policy advice in order to restore growth" (Williamson 1990)

this relationship's confirmation in multiple studies lends credence to the often-recited policy axiom that freer markets are more generally prosperous. However, there are two methodological problems that unduly contribute to these confirmatory findings: (1) the validity of the EFW index as a measure of "free market capitalism", and (2) ahistoricity in these analyses, whereby the EFW-growth relationship is assumed to be stable over time.

Purity of Measurement. Scholastic studies that use the EFW often treat it as a proxy for a "market economy" (Berggren 2003), "liberalization" (De Haan, Lundstrom, and Sturm 2006), "neoliberal" economies (Tures 2003) or some cognate concept that suggests a more liberal capitalism. With this understanding of what is signaled by the EFW index, the index's relationships with growth is thus taken as real world relationships between prosperity and liberalism.

In strict terms, EFW purports to measure "economic freedom", which the study's authors describe as "institutions and policies are consistent with economic freedom when they provide an infrastructure for voluntary exchange and protect individuals and their property from [public sector or populist] aggressors" (Gwartney and Hall 2009: 4). Empirically, this notion of "freedom" stresses (1) minimal government ownership or control of society's economic resources and enterprises and (2) minimal state interference in private sector activity. Roughly four-fifths of a country's "freedom" score is determined by the relative absence of government economic intervention. Table 1 (below) depicts the measures used to render the EFW's "economic freedom" scores. Further details are given in Gwartney, Hall and Lawson's methodological index.

[Insert Table 1 about here]

Although it has much overlap with economic liberalism, the EFW's empirical construction incorporates additional factors. The index's construction effectively measures the degree to which a country's national economic policy model resembles those of the English-speaking OECD and Switzerland, rich and well-governed countries that have pursued free market policies (Cohen 2011). Although it is true that "economic freedom", as defined by its authors, is a hallmark of the rich world overall CITES, the non-Anglo-Swiss OECD's scores are buoyed by the EFW's *Legal Structure & Property Rights* sub-index, which shows a stronger relationship via confirmatory factor analysis to the World Bank's *Governance Indicators* (Kaufmann, Kraay, and Mastruzzi 2009) than other, more strictly *laissez-faire* related EFW sub-indices (Cohen 2011).

This discrepant EFW sub-index is argued by Cohen (2011) to be capturing what is typically understood as "good governance" (discussed in Burki and Perry 1998): the degree to which a political economic system is politically accountable, politically stable, ruled by law, non-corrupt and managed by a professional and competent civil service. Its inclusion in the EFW is tantamount to a conflation of two related but distinct concepts. While economic liberalism and good governance are often both present in the world's most advanced countries, many OECD national economic models maximize good governance without *maximizing* economic liberalism. Distinguishing good governance from economic liberalism is not only a methodologically valid re-specification of a country's economic policy environment, but is also meaningful because it enables us to assess the relative effectiveness of Anglo-Swiss economic models *versus* other models used in the rich world.

A second issue is the possible conflation of "economic freedom" and macroeconomic performance. Specifically, the EFW's *Access to Sound Money* sub-index uses inflation rates and

variability as constituent measures. While a stable money system is essential to a well-functioning market economy, and inflation can be the result of government actions (e.g., seigniorage, aggressive monetary policy or chronic deficit spending), the degree to which these metrics capture hands-off economic governance *versus* the success of macroeconomic policy merits questioning. Inflation can be pursued and influenced, but not completely controlled, by policy-makers, and in this sense resembles economic growth or unemployment rather than deregulation or tax reductions. Furthermore, there are situations in which "economically free" countries can be more vulnerable to inflation problems. For example, economic openness can make a country more vulnerable to price destabilization stemming from external price shocks not directly attributable to their own economic failings [for example, in global commodity price spikes or currency crises rooted in contagion or self-fulfilling prophesy (on the latter topic, see Flood and Marion 1998)].

With these two concerns in mind, the analysis that follows seeks to parse the EFW's governance and inflation components from its other measures of "economic freedom". This is done by separating the index into three different measures, whose empirical construction mirrors the agglomerative techniques used to construct the original EFW index. Details are given in the methods section below.

Ahistoricity and Omitted Variables. The issue of ahistoricity in time series analysis is discussed in Isaac and Griffin (1989). Ahistorical analyses tend to ignore meaningful differences in the historical contexts modeled by their theories and measured by their quantitative data. In terms of our present discussion, ahistoricism produces the impression that liberalism's relationship with economic activity operates in the same way over history. The effectiveness of these reforms is often understood as intrinsic to market- *versus* government-dominated

economies, and not contingent on, for example, the debt crises of the 1980s, the post-Cold War peace dividend and democratic wave, the early 1990s international investment boom, or today's ongoing global financial crisis. There were several major (geo)political, economic and social changes occurring around the same time that the world was embracing neoliberalism. If liberalization's benefits are indeed timeless, then faster growth should accrue to more *laissez-faire* countries across historical contexts. If, however, liberalism's effects inhere during a period in which several long-run historical changes were occurring, then such a conclusion may be hasty.

The analysis below suggests that scholars' common attribution of developing world prosperity may be confusing the effectiveness of free markets from the idiosyncratic political and economic factors that helped resolve a very specific historical crisis. When neoliberalism's relationship with growth is examined on a period-by-period basis, the former exerts a predictive power around 1990, when developing countries were being experiencing a wide range of changes. Liberalism's failure to differentiate fast- from slow-growth countries outside of this period suggests that countries are not engaged in some kind of trans-historical process that continually rewards the world's most liberal countries with faster growth. Liberalism's capacity to discern growth rates in a limited time frame suggests that some important set of variables is being omitted.

The EFW's secondary literature has attempted to deal with this concern over omitted controls by using extreme bounds analysis (Levine and Renelt 1992), a method in which a regression's key predictors' robustness is tested against the inclusion of tens of controls through thousands of regressions that use them in different combinations. This technique for dealing with omitted variable bias resembles a form a data mining, in which an analysts throws a bucket

of controls at a relationship without making a large investment in discerning which of these controls may be of particular relevance, given the broader context in which these case studies unfolded. As such, potential controls that are germane to major post-Cold War era changes are included as one of many controls in a larger grab-bag of standard, off-the-shelf and often marginally successful other controls. When the threshold for accepting a hypothesis under sensitivity analysis is lowered to accept predictors that commonly, rather than strictly, maintain predictive power net of this grab bag of controls (Sala-i-Martin 1997), it can be less surprising that they pass the test. The vast majority of the controls included in the sensitivity analyses had non-compelling reasons for being included in the first place, and predictors that maintain significance net of these controls pass the test.

By paying close attention to periodicity (the potential that empirical relationships vary over time), an analysis can be alerted to the possibility that the relationships inhering in one context drive the overall findings obtained in larger panels. When these consequential historical moments are identified, they can be examined in depth to find controls that are more meaningful. Here, we are principally concerned with establishing the "freedom" growth relationship's dependency on historical context. We leave a fuller explanation of which historically-specific factors were most important to another study. However, we do offer one potential candidate: the growth of international direct investment.

Inward Foreign Direct Investment. At first glance, the importance of inward FDI to growth suggests that some – but not all – forms of liberalization are important to growth. The international investment boom of the neoliberal era did occur as economies liberalized, and it is hard to imagine how it could have materialized without removing inward investment restrictions, public asset privatization and several other post-Cold War reforms. However, there are reasons

to be cautious about using the FDI-growth relationship as a basis for concluding that liberalism generated economic growth by placing economic resources under the control of markets' inherently optimizing influence. First, FDI is influenced by a range of factors that are probably aided by government intervention, like education or infrastructure, and factors that are not related to policy, like market size or political stability (Noorbakhsh and Paloni Ali 2001; Addison and Heshmati 2004; Janicki and Wunnava 2004; Asiedu 2006). Second, the relationship between FDI and liberalism is fraught with the same complications involving historical context. FDI growth followed a contemporaneous mixture of geopolitical pacification, governance improvements, Western-sponsored bailouts and stabilization program, and a range of other changes that may have made both liberalization and increased international growth possible.

Even without contemplating the complexity involved in disentangling the FDI-liberalism relationship, the evidence presented below straightforwardly suggests that liberalism's effects on growth are marginal net of FDI. Such a finding offers a clear comment on the policy implications of the widely-reported "freedom"-growth relationship. Even if liberalization is a necessary precondition for international investment growth, not all forms of liberalization have a clear and direct link to attracting FDI. Removing controls on inward investment is obviously helpful, but several other reforms – like welfare state cutbacks or reduced public sector investment – have indirect and highly theoretical relationships with FDI at best. A conservative reading of the evidence suggests that not all forms of liberalism spur FDI, so the absence of a liberalism effect net of FDI questions the necessity or utility of at least some liberalization reforms.

2. Methods

2.1 Data

Units of Analysis. The data examines 184 countries as a panel of six five-year periods from 1980 to 2007 (with the last period covering only three years). This panel design is the product of the EFW being assessed over five-year intervals prior to 2000. EFW scores represent the mean of each period's starting and end points, and data that is available on a yearly basis is presented as a within-period mean.

Dependent Variable. The study's dependent variable is the growth rate of *per capita* GDP (2005 $PPP) from the World Bank (2011).

"Economic Freedom" Measures. Gwartney, Hall and Lawson's (2011) *Economic Freedom of the World index* is constructed as an average score of five sub-indices, each of which purports to capture some facet of "economic freedom" as its authors define the concept. These five sub-indices are listed above in Table 1. In the original report, the individual metrics of each sub-index are scaled between one and ten, their unweighted mean renders the sub-index's overall score, and the unweighted mean of these five sub-indicies renders a country's overall "freedom" score.

The EFW was deconstructed to parse out constituent measures that capture liberal policy from other components. The *Legal Structure & Security of Property Rights* sub-index is treated as a standalone independent variable that captures "good governance" (along the lines of Burki and Perry 1998; Kaufmann, Kraay, and Mastruzzi 2009). Inflation rates are assessed as log-transformed GDP deflator change measures (from World Bank 2010), and the *Sound Money* index is reconstituted as a mean of the non-inflation measures' indexed scores. The remaining EFW measures are re-agglomerated using the same averaging of nested sub-indexes without the

extricated measures, resulting in an assessment of "economic liberalism" that is separate from good governance and stable prices.

Net Inward Foreign Investment. Net inward FDI (% GDP) is drawn from the World Bank (2011).

Per Capita GDP. In addition to these measures, the analysis considers logged real per capita GDP (PPP) (from World Bank 2010) as a proxy for a society's aggregate wealth. Doing so enables us to distinguish the effects of being rich from being liberal, well-governed or price-stable.

2.2 Regression Methods

I assess these relationships using two estimators: Beck and Katz's (1995) panel-corrected standard error OLS with a first-order autocorrelation (PCSE) and Driscoll and Kraay's (1998) panel fixed-effects models (Hoechle 2007).[2] The former model captures static relationships between liberalism and growth (i.e., whether faster growth tended to accrue to more liberal countries in any given period). The latter model captures whether a given country's embrace of liberalism improved its baseline growth rates. Missing data are handled by multiple imputation with randomness (King et al. 2001), using Honaker et al.'s (2010) Amelia II package for R.[3]

[2] Models were chosen based on diagnostics' suggestion of cross-sectional dependence and both scale and groupwise heteroskedasticity. A Pesaran (2004) test of cross-sectional dependence (De Hoyos and Sarafidis 2006) suggest a very high probability that errors are related cross-sectionally. Diagnostics suggest both scale and groupwise heteroskedasticity in all models presented below. White's (1980) general test of heteroskedasticity (Baum, Cox, and Wiggins 2000) predict scale heteroskedasticity with a high degree of confidence, and a robust test for equality of variance (Cleeves 2000) suggests a high likelihood of heteroskedasticity across groups. Wooldridge tests for autocorrelation in panel data (Drukker 2003) reject the null hypothesis of no autocorrelation in all samples examined here.

[3] Ten sets were imputed. Random seed was set to 120. MAR is assumed on the grounds that available predictors effectively predict missingness (e.g., governance, GDP, region). Lags and leads were used for all time-variant variables. In addition to the variables described below, the imputation model also used net capital account, remittances, net principal arrears, interest expenditures, debt grace period, grant on issues, debt maturity, public debt service, bank credit to private sector, portfolio investment and education (primary, secondary and tertiary) data from the World Bank (2011). In addition, the model used modified World Bank-defined regional indicators, whose modifications include distinct groupings of the pre-1990 OECD member countries, former Warsaw Pact-allied countries (including the Baltic states) and the Ex-USSR.

3. Unpackaging the Freedom-Liberalism-Growth Relationship

I argue that studies linking economic freedom to growth employ two problematic assumptions that shape their findings: conceptual conflation and ahistoricity. This section provides an exposition of data that illustrate these problems.

Growth and "Freedom": Discontinuous Change. Figure 1 (below) presents box plots of growth rates, liberalism, governance and inflation from 1980 to 2007:

[Insert Figure 1 Here]

This figure suggests a major change in all four indicators between 1990 and 1995. One way to interpret Figure 1 is to understand the "freedom"-growth relationship as involving two types of change. The first is a radical shift during the early-1990s, in which liberalism, governance and prices improved radically. I argue that these changes are products of the one-shot political-economic transition that occurred after the Cold War's end, which involved a range of major world-systemic changes.

After the mid-1990s, liberalism levels continued to rise modestly, governance deteriorated and then stagnated, and general inflation reached levels that inflation hawks might describe as ideal. It is unclear whether growth rates enjoyed continuing long-term improvement until 2007, notwithstanding the short downturn near 2000 and the catastrophic one that would follow in 2008. In other words, the post-1995 relationship gives us a sense of how maximizing liberalism affects growth in "normal" times. It is not clear from this figure whether continued liberalism coincided with – let alone spurred - continuous growth improvements.

The Growth-"Freedom" Relationship in Different Countries. Table 2 looks at median country and country groupings' EFW total and sub-component scores across decades:

[Insert Table 2 Here]

Comparisons like those in the top panel suggests are common in the "freedom" literature. They suggest that better developed countries tend to be "freer", more liberal, more liberal, better governed and more price-stable. In general, we expect developing countries to grow faster because they have the "room to grow", so the comparatively low growth rates of the OECD do not damage this argument. From the vantage point of the top panel, prosperity, "freedom" and development all look like they are related, suggesting that they are part of a common process.

The middle panel breaks these changes down by world regions. Here, the relationship between liberalism, governance, inflation and growth seems more complicated. The two world regions with the longest and strongest dedication to economic liberalism are East Asia and Latin America, and the latter has grown more slowly than all other regions except Sub-Saharan Africa and the Middle East/North Africa. South Asia has typically been one of the world's most illiberal and poorly governed regions, but also one of its most price-stable and fastest-growing. Finally, note the elevated growth rates achieved in very poor, commodity-bearing regions like the Ex-USSR or Sub-Saharan Africa during the 2000s. This could be interpreted as outgrowths of rising liberalism, but could just as easily signal the importance of historical context. During the 2000s, global commodity prices rose in a broader context of global price stability. In the case of the Ex-USSR, it is also difficult to exclude *a priori* the effects of geostrategic expenditures in the region.

The bottom panel of Table 2 shows that many wealthy countries do not maximize liberalism. Aggressive liberalization is a hallmark of the English-speaking OECD, while other wealthy countries are not markedly more liberal than Latin America. The tie that binds much of Northern Europe and the Anglo OECD (except the US in the 2000s) is the maximization of

governance quality. When developing countries are being told to liberalize aggressively, they are being told to emulate Anglo OECD policies, not the policies used by all wealthy countries.

Periodicity in the Liberalism-Growth Relationship. The relationship between economic growth, "economic freedom" and its constituent measures have changed over time. Figure 2 (below) presents a table of scatterplots depicting the bivariate relationship between liberalism and growth over five-year intervals between 1980 and 2007.

[Insert Figure 2 Here]

The graph suggests that faster growth did not strongly accrue to the most liberal countries across all historical period. The relationship is particularly strong during the late-1980s and early-1990s, and to a lesser extent during the late-1990s.[4] In the 2000s, these variables are weakly related.

International Real Investment. This paper is not arguing that pro-market reforms did not help growth. Rather, it is proposing that, at best, specific reforms that were implemented in conjunction with other changes that may also have been key to the neoliberal-era economic turnaround. The most important pro-growth liberalization initiative suggested in these analyses involved promoting inward foreign investment, which had previously been restrictive (Bruton 1998). Some of this boom is rooted in liberalism – for example, removing inward investment restrictions – but other important policies, like Western loan guarantees to struggling countries – are examples of government "interference" in markets. Figure 3 (below) depicts a box plot of net inward FDI (% GDP) levels in 96 fully-reported countries.

[Insert Figure 3 Here]

[4] Note that eliminating countries with extraordinarily low liberalism scores in the 1980 – 1985 period does not alter this correlation substantially.

International integration is not the sum total of liberalization reforms, and it is a leap to infer that *laissez-faire* works because international investment helps countries grow. Many forms of liberalization are only indirectly or peripherally related to attracting foreign investment. Countries ability to attract foreign investment does not necessarily involve a race to embrace other forms of liberal orthodoxies, like low taxes, small government or limited welfare states (Kiser and Laing 2001). In the next section, I show that liberalism shows little to no effect on growth net of inward FDI.

Regression Analyses

The evidence suggest that economic liberalization reforms may have helped countries grow faster, but with two important qualifications. First, more liberalization is not continuously rewarded with more growth. The analyses presented below suggest that the most consequences liberalization reforms occurred near the end of the Cold War, when the world economy transitioned from a system of more interventionist to more liberal economic systems. Once countries eliminated the more egregious forms of state economic intervention, there do not appear to have been additional growth-related benefits to further liberalization.

This possibility leads to the second important qualification: much, if not all, of economic liberalism's relationship with growth disappears when we include controls related to attracting inward investment. While economic liberalism may have helped establish this investment boom, these findings call into question the value of liberalization reforms that did not directly engage inward investment.

PCSE Models. Table 2 (below) presents the results of a PCSE model of economic growth on "economic freedom", its constituent measures, and FDI. These models ask whether liberal countries tended to outgrow their illiberal counterparts in a static sense. Quadratic

liberalism terms were not-significant, and their inclusion did not affect the models' other predictors.

[Insert Table 2 Here]

Overall, "economic freedom" has a strongly significant and positive relationship with economic growth (Models 1.1 and 2.1). The coefficients predict considerable effects. For example, Model 1.1 suggests that a country at the sample's 75th percentile "freedom" scores (e.g., late-1990s Argentina, late-1990s Oman or present-day Kenya) would enjoy 2.7 percentage points faster annual growth rates than one at the 25th percentile (e.g., early-1980s Israel, early-1990s Egypt or present-day Chad), *ceteris paribus*. Recall that in all of these models, base year *per capita* GDP offsets these effects, meaning that richer countries are expected to grow more slowly than poorer ones.

When we break economic freedom down into its three constituent concepts – liberalism, good governance and inflation – we find that the EFW's *laissez-faire* component is a considerably weaker and more tenuous predictor. Model 1.2 suggests that liberalism differentiates faster- from slower-growth countries over the entire 1980 – 2007 period, with a predicted effect of 1.5 percentage point annual growth differential between those at the 75th and 25th percentiles of this measure (e.g., post-1990 Uruguay or Guatemala *versus* Venezuela or Congo). Governance and inflation coefficients suggest a 75th-25th percentile difference of 1.2 and -0.8 percentage points, respectively. Overall, economic liberalism is only part of what drives the observed relationship between "economic freedom" and growth.

Model 1.2 examines the effect of these variables after 1995, when the many changes that coincided with global economic liberalization had arguably set in. After 1995, liberalism's relationship with growth is insignificant. Faster growth did not accrue to more liberal countries

once the broad array of post-Cold War political, economic and social changes became entrenched.

In Models 1.3 and 2.3, we examine whether the liberalism-growth relationship holds net of FDI. Model 2.3's results should not be surprising, given that liberalism effects are insignificant after 1995 without this control. However, Model 1.2 shows no effect of liberalism net of FDI over the entire period studied here.

These results suggest that faster growth does not tend to accrue to the most liberal countries in any given period. Much of the relationship between liberal policies and economic growth is rooted in a comparison of the generally more illiberal and financial crisis-ridden pre-1995 era, and the crisis-ridden pre-Cold War era and the more economically stable, prosperous and liberal post-1995 era. However, these models do not tell us whether countries coleltively benefitted by transitioning from the generally illiberal regimes of the Cold War era to more liberal economic models of the neoliberal era. To address this question, we turn to fixed-effects models.

Fixed-Effects Models. Table 3 (below) presents the results our fixed-effects models.

[Insert Table 3 Here]

"Freedom" is a significant predictor of growth in both Models 3.1 and 4.1, as is liberalism's effect when we consider the effects of the liberalism reforms that took place over the Cold War's end (Model 3.2). Liberalization's effect is not significant after 1995 (Model 4.2). Model 3.2 can be read as suggesting that liberalizing reforms did help countries growth, and this effect remains significant net of FDI in Model 3.3. Assuming no omitted variable bias in Model 3.3 (a problematic assumption upon which we will not dwell), we can conclude that some forms of liberalization that did not spur FDI helped. One might infer from these results that countries

benefitted by removing its most egregious fetters on markets in the late-1980s and early-1990s, even though further liberalization did not seem to help after 1995 (Model 4.3). Even if liberalization was helpful in one particular context, the data do not suggest a trans-historical relationship whereby maximizing liberalism results in maximal growth.

Review and Reflections on Post-Crisis Policy

These analyses suggests that countries are not continually rewarded for more liberalism with more growth. At best, the data suggest that market liberalization coincided with a range of changes that helped the world economy transition from stagnancy and volatility to stable growth, at least until 2007. Prior findings linking "freedom" to growth depend on two analytical conventions: not distinguishing liberalism from governance or price stability, and ignoring the historical specificity of these relationships. We do not exclude the possibility that some liberalization can help countries grow, but a conservative reading of the evidence suggests that it helped rescue growth when it replace egregiously interventionist regimes, mired in financial problems, an highly-militarized international environment, bad governance and a arrange of other context-specific problems. This paper produced evidence that deconstructing these context-specific factors conditions liberalism's predicted effect on growth substantially, and leaves open the question of whether conformity to *laissez-faire* ideas would matter as these contextual changes are further parceled out. In any case, there is little support for the view that freer markets are inherently superior mechanisms for allocating resources in ways the promote growth.

These findings have present-day policy implications. Since 2008, the world's governments have faced serious questions about systemic financial stability, weak aggregate demand and very low growth rates. Analysts have devised a range of solutions to these

problems, but governments have generally opted for "hands off" policy solutions like tax cuts, continued financial sector deregulation, fiscal austerity and welfare state cost containment. Within policy debates, these policies have often been justified by views that states cannot create prosperity or stability, and that government intervention is bound to have self-defeating consequences.

Our collective distrust in active government intervention is partly produced by an understanding of economic history and the econometric literature that takes neoliberal reforms to have unleashed economically-optimizing market forces that produce prosperity. They tend to downplay the role that liberalization played in producing the global economic crisis from which neoliberalism emerged, and the aggressive moves employed by states to stabilize global finances and rekindle growth. Likewise, they downplay non-economic policy factors that may have helped spur the global economy of the 1990s, like peaceful international relations or increased democracy. This analysis casts doubt on the view that markets must always run free if we are to enjoy prosperity. We may read history in ways that muddle the various factors that promoted growth in our last great global economic crisis, using historical analogies that may not fully fit present-day circumstances.

Although there seems to be little, if any, benefit to *maximizing* our conformity to *laissez-faire* ideals, this analysis does not suggest that there is no benefit to liberalization. Liberalization reforms that help attract foreign investment may indirectly help a country's development prospects, and egregious forms of market suppression may hurt the economy. After nearly a quarter century of neoliberalism, however, markets have been substantially liberalized, and a straightforward view of the 2008 crisis suggests that our probably at least partly involve underregulated – not overregulated – markets.

More broadly, making sense of our present-day policy choices invariable involves our understanding of history, and the way we understand history is shaped by the theoretical claims made by those whom we understand to have solved our problems. However, these standard narratives are always influenced by various forms of *groupthink* that can and should be probed as we accumulate experience. With regard to neoliberalism, we can see evidence that policy discourse may have accepted ideas that prevailed at the end of the last major global crisis, and held on to these beliefs moving forward. One way of probing the possibility that we accept old theories uncritically is to probe the logic by which we conventionally measure highly legitimated policy concepts, and to see whether presumably trans-historical laws in fact operate across historical contexts. In this exercise, both problems were found in the means by which we link freer markets to growth, and doing so introduced serious questions about the premises upon which we continue to build policy.

Bibliography

Addison, Tony, and Almas Heshmati. 2004. "The New Global Determinants of FDI Flows to Developing Countries: The Importance of ICT and Democratization." Pp. 151- 188 in *Monetary integration, markets and regulation*, edited by Iftekhar Hasan. Emerald Group Publishing.

Amable, Bruno. 2011. "Morals and Politics in the Ideology of Neo-Liberalism." *Socio-Economic Review* 9(1):3-30.

Asiedu, E. 2006. "Foreign Direct Investment in Africa: The Role of Natural Resources, Market Size, Government Policy, Institutions and Political Instability." *The World Economy* 29(1):63–77.

Babb, S.L., and B.G. Carruthers. 2008. "Conditionality: forms, function, and history." *Annual Review of Law and Social Science* 4:13–29.

Barro, Robert J. 2007. "Milton Friedman: Perspectives, particularly on monetary policy." *Cato Journal* 27(2):127.

Barro, Robert J., and Xavier Sala-i-Martin. 1992. "Public finance in models of economic growth." *The Review of Economic Studies* 59(4):645.

Baum, C.F., N.J. Cox, and V. Wiggins. 2000. "Tests for Deteroskedasticity in Regression Error Distribution." *Stata Technical Bulletin* 55:15- 17.

Beck, N., and J.N. Katz. 1995. "What to do (and not to do) with time-series cross-section data." *American Political Science Review* 634–647.

Berggren, Niclas. 2003. “The Benefits of Economic Freedom: A Survey.” *The Independent Review* 8(2):193 - 211.

Brooks, C., and J. Manza. 2006. “Why do welfare states persist?” *Journal of Politics* 68(4):816–827.

Bruton, Henry J. 1998. “A Reconsideration of Import Substitution.” *Journal of Economic Literature* 36(2):903-936. Retrieved March 14, 2011.

Centeno, Miguel A., and Joseph N. Cohen. 2010. *Global Capitalism*. Malden, MA: Polity.

Centeno, Miguel A., and Joseph N. Cohen. forth. “The Arc of Neoliberalism.” *Annual Review of Sociology*.

Cleeves, M. 2000. “Robust Tests for the Equality of Variances Update to Stata 6.” *Stata Technical Bulletin* 53:17-18.

Cohen, Joseph N. 2011. “Is ‘Economic Freedom’ Strictly Free Market Capitalism? Decomposing the Economic Freedom of the World Index and Its Relationship with Development.”

Cohen, Joseph N., and Miguel A. Centeno. 2006. “Neoliberalism and Macroeconomic Performance, 1980 - 2000.” *Annals of the American Academy of Political and Social Science* 606:32 - 67.

Denison, Edward Fulton. 1980. *Accounting for Slower Economic Growth: The United States in the 1970s*. Brookings Institution Press.

Dreher, A. 2002. “The development and implementation of IMF and World Bank conditionality.” *Discussion Paper Series*.

Driscoll, John C., and Aart C. Kraay. 1998. “Consistent Covariance Matrix Estimation with Spatially Dependent Panel Data.” *Review of Economics and Statistics* 80(4):549-560. Retrieved July 8, 2011.

Drukker, D. M. 2003. “Testing for serial correlation in linear panel-data models.” *Stata Journal* 3(2):168–177.

Easterly, William Russell. 2002. *The Elusive Quest for Growth: Economists’ Adventures and Misadventures in the Tropics*. MIT Press.

Edwards, Sebastian. 1995. *Crisis and Reform in Latin America: From Despair to Hope*. A World Bank Publication.

Flood, R., and N. Marion. 1998. *Perspectives on the recent currency crisis literature*. National Bureau of Economic Research Cambridge, Mass., USA.

Gwartney, James D., Joshua Hall, and Robert Lawson. 2010. *Economic Freedom of the World: 2010 Annual Report*. Vancouver: Frasier Institute.

Gwartney, James D., Richard L. Stroup, Dwight R. Lee, and Tawni Hunt Ferrarini. 2010. *Common Sense Economics: What Everyone Should Know About Wealth and Prosperity*. Revised Edition. St. Martin’s Press.

De Haan, Jakob, Susanna Lundström, and J. E Sturm. 2006. “Market-oriented institutions and policies and economic growth: A critical survey.” *Journal of Economic Surveys* 20(2):157–191.

Harvey, David. 2005. *A Brief History of Neoliberalism*. Oxford University Press.

Hoechle, D. 2007. “Robust standard errors for panel regressions with cross-sectional dependence.” *Stata Journal* 7(3):281.

Honaker, J., G. King, and M. Blackwell. 2010. “Amelia II: A program for missing data.” *Cambridge, MA: Harvard University*.

De Hoyos, R.E., and V. Sarafidis. 2006. “Testing for cross-sectional dependence in panel-data models.” *Stata Journal* 6(4):482.

Janicki, H.P., and P.V. Wunnava. 2004. “Determinants of foreign direct investment: empirical evidence from EU accession candidates.” *Applied Economics* 36(5):505–509.

King, G., J. Honaker, A. Joseph, and K. Scheve. 2001. “Analyzing incomplete political science data: An alternative algorithm for multiple imputation.” *American Political Science Association* 95:49–69.

Kiser, Edgar, and Aaron Matthew Laing. 2001. “Have We Overestimated the Effects of Neolbieralism and Globalization? Some Speculations on the Anomalous Stability of Taxes on Business.” Pp. 51-68 in *The Rise of Neoliberalism and Institutional Analysis*, edited by John L. Campbell and Ove Kaj Pedersen. Princeton: Princeton University Press.

Klein, Daniel B, and Charlotta Stern. 2007. “Is There a Free-Market Economist in the House? The Policy Views of American Economic Association Members.” *American Journal of Economics and Sociology* 66(2):309-334. Retrieved May 12, 2011.

Kolodko, Grzegorz W. 2000. *From Shock to Therapy: The Political Economy of Postsocialist Transformation*. New York: Oxford University Press.

Krippner, Greta R. 2011. *Capitalizing on Crisis: The Political Origins of the Rise of Finance*. Harvard University Press.

Laffer, Arthur B., Stephen Moore, and Peter Tanous. 2009. *The End of Prosperity: How Higher Taxes Will Doom the Economy--If We Let It Happen*. Threshold Editions.

Miller, Terry, and Kim R. Holmes. 2011. *2011 Index of Economic Freedom*. Washington, DC: Heritage Foundation and The Wall St. Journal.

Noorbakhsh, F., and A. Paloni Ali. 2001. “Human capital and FDI inflows to developing countries: new empirical evidence.” *World Development* 29(9):1593–1610.

Norberg, Johan. 2003. *In Defense of Global Capitalism*. Cato Institute.

Pesaran, M.H. 2004. “General diagnostic tests for cross section dependence in panels.” *CESifo Working Paper Series No. 1229; IZA Discussion Paper No. 1240*.

Rodríguez, F., and D. Rodrik. 2000. “Trade Policy and Economic Growth: A Skeptic’s Guide to the Cross-National Evidence.” *NBER Macroeconomics Annual* 261–325.

Ruggie, J. G. 1982. “International regimes, transactions, and change: embedded liberalism in the postwar economic order.” *International organization* 36(02):379–415.

Sachs, Jeffrey D. 1991. *Developing Country Debt and the World Economy*. 1st ed. University Of Chicago Press.

Sachs, Jeffrey D. 1989. “Introduction.” Pp. 1-49 in *Developing Country Debt and the World Economy*, edited by Jeffrey D. Sachs. Chicago: University Of Chicago Press.

Sowell, Thomas. 2008. *Applied Economics: Thinking Beyond Stage One*. 2nd ed. Basic Books.

Sowell, Thomas. 2007. *Basic Economics: A Common Sense Guide to the Economy*. Basic Books.

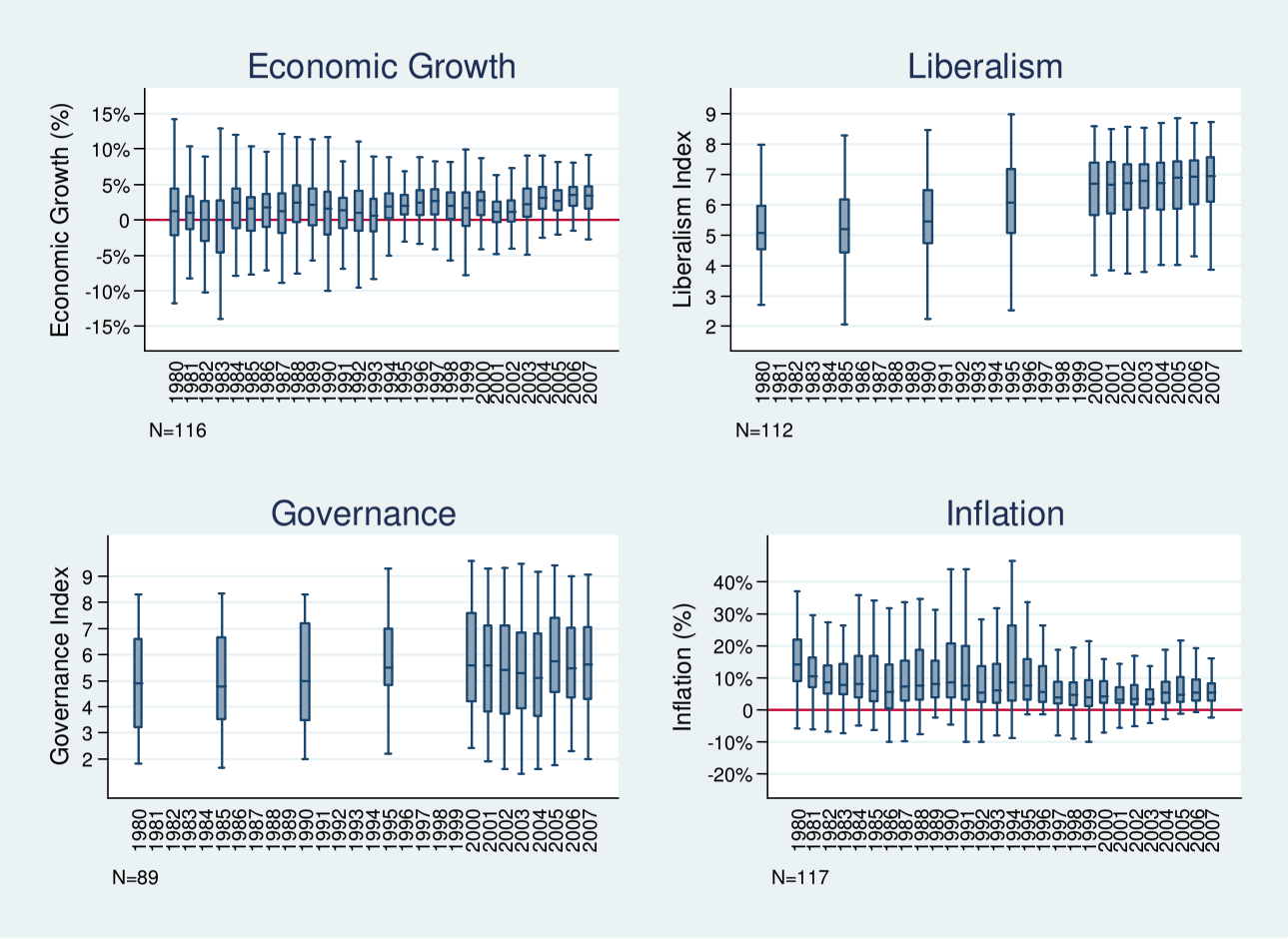
White, H. 1980. "A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity." *Econometrica: Journal of the Econometric Society* 817–838.

Williamson, John. 1990. "What Washington means by policy reform" edited by John Williamson. *Latin American adjustment: how much has happened* 7–20.

World Bank. 2011. "World Development Indicators." Retrieved (http://data.worldbank.org/data-catalog/world-development-indicators).

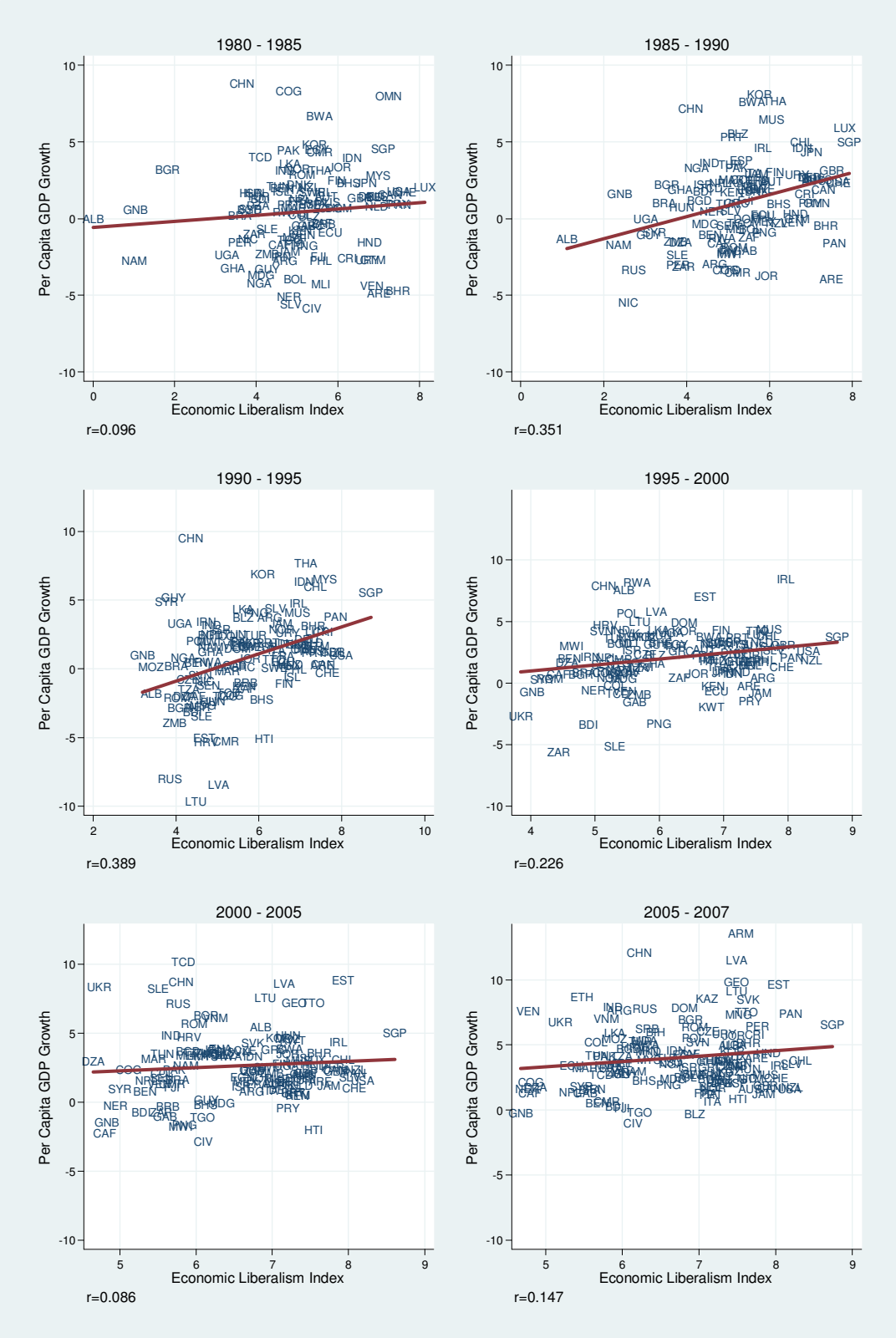
Yergin, Daniel, and Joseph Stanislaw. 2002. *The Commanding Heights : The Battle for the World Economy*. Rev Upd Su. Free Press.

Figure 1: Box Plots of Growth and Economic Freedom Component Measures, 1980 - 2007



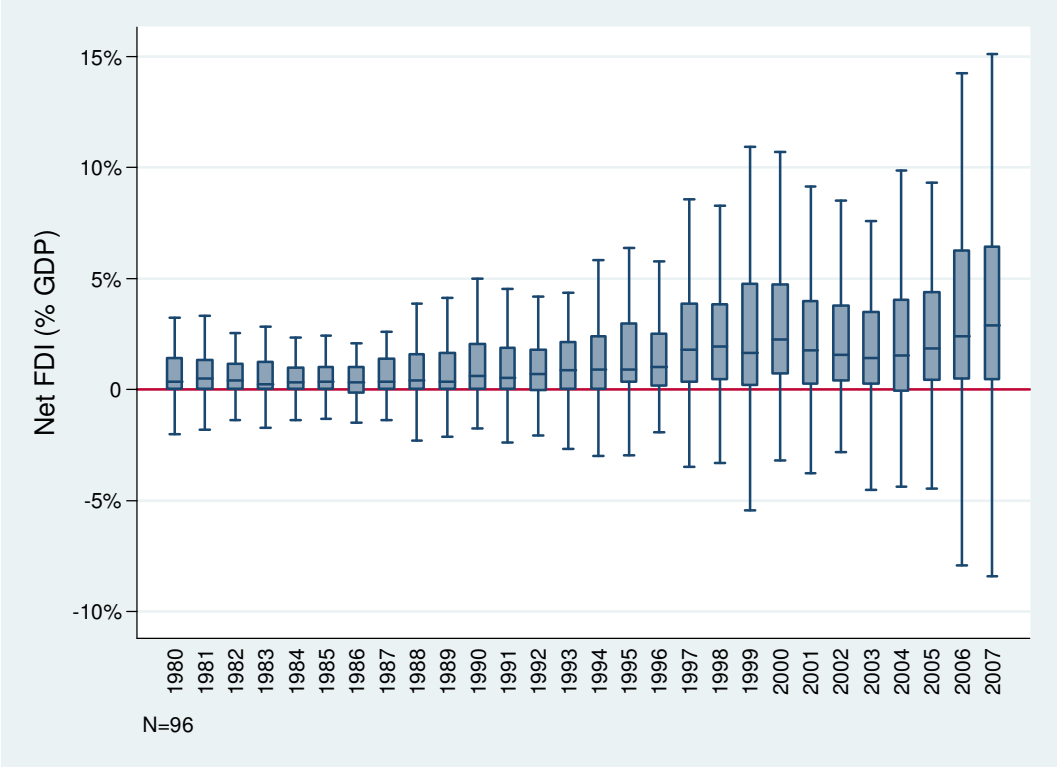
Sources: Gwartney, Hall and Lawson (2010); World Bank (2011)
***Note*:** Outliers are suppressed

Figure 2: "Economic Freedom" and Growth, 1980 – 2007



Sources: Gwartney, Hall and Lawson (2010); World Bank (2011)

Figure 2: Net Inward FDI (% GDP), 1980 - 2007



Sources: Gwartney, Hall and Lawson (2010); World Bank (2011)
Note: Outliers are suppressed

Table 1: Constituent Sub-Indices of Economic Freedom of the World Index

Component	***Conditions that Enhance "Freedom"***
Size of Government Expenditures, Taxes and Enterprises	Low government consumption, transfers, subsidies, investment and enterprise ownership, and low taxes.
Freedom to Trade Internationally	Low and invariant tariffs, low regulatory trade barriers, formal market-determined exchange rates, relatively large trade sectors, low capital market controls
Regulation of Credit, Labor and Business	Private banking, openness to international banking, private sector-directed credit, low interest rate controls, minimum wages, regulatory compliance costs, prevalence of centralized collective bargaining, price controls, need to pay bribes or military conscription.
Access to Sound Money	Low and invariable inflation, low growth in M1 money supply, no restrictions on foreign currency bank accounts
Legal Structure & Security of Property Rights	Independent judiciary, impartial courts, protection of property rights, no military interference in politics or courts, rule of law, legal enforcement of contracts, low regulation on real estate

Source: Gwartney, Hall and Lawson (2010)

Table 2: Growth, Freedom and Its Sub-Components, by Region- & Income Group-Decade

	GDP Growth			"Economic Freedom"			Economic Liberalism			Governance			Inflation		
Group	**1980s**	**1990s**	**2000s**	**1980s**	**1990s**	**2000s**	**1980s**	**1990s**	**2000s**	**1980s**	**1990s**	**2000s**	**1980s**	**1990s**	**2000s**
High Income	1.6	2.2	2.3	6.4	7.0	7.5	6.1	6.8	7.4	6.9	7.7	7.9	9.4	3.4	3.7
Upper-Middle Income	0.6	2.4	3.9	5.6	5.9	6.7	5.5	5.8	6.8	5.5	5.8	5.8	17.0	15.8	6.3
Lower-Middle Income	0.8	2.2	3.9	5.0	5.4	6.2	4.7	5.4	6.4	3.9	4.6	4.8	13.3	26.1	8.3
Low Income	0.2	0.3	2.6	4.8	4.8	5.8	4.5	4.7	6.0	4.0	4.2	4.1	18.8	21.1	10.7
East Asia & Pacific	2.0	3.1	3.1	5.8	6.3	6.5	5.5	6.2	6.5	5.6	5.5	5.5	12.0	8.3	5.9
Eastern Europe		3.3	5.7		5.1	6.6		4.5	6.8		6.4	5.6		30.2	5.8
Ex-USSR		-4.0	8.5		3.9	6.4		3.2	6.6		3.9	5.2		78.9	14.2
Latin America	0.7	2.1	2.6	5.2	5.9	6.5	5.6	6.2	6.9	4.2	4.8	4.6	25.0	14.3	6.5
Middle East & N. Africa	-3.3	2.6	2.0	5.1	5.6	6.4	5.3	5.7	6.5	4.1	4.9	6.0	19.6	12.4	8.4
OECD	2.2	2.4	2.1	6.5	7.2	7.6	6.1	6.9	7.4	7.4	8.3	8.2	8.1	2.7	2.4
South Asia	3.0	3.9	4.5	4.9	5.3	5.9	4.6	5.2	5.7	3.6	4.1	4.4	9.5	7.4	5.7
Sub-Saharan Africa	0.2	0.6	2.3	4.9	5.0	5.8	4.4	4.8	5.9	4.3	4.4	4.3	16.0	18.3	11.4
USA	2.5	2.4	1.7	7.6	8.1	8.1	7.5	8.0	8.1	8.3	8.6	7.9	3.8	2.1	2.6
Anglo	1.9	1.9	2.2	6.7	7.9	8.1	6.4	7.7	7.9	7.4	8.5	8.8	6.9	2.0	2.9
Germany	2.1	1.9	1.1	6.9	7.4	7.5	6.8	7.1	7.2	7.6	8.7	8.8	2.8	2.1	1.1
France	1.8	1.8	1.3	5.9	6.8	7.1	5.1	6.6	6.9	7.0	7.6	7.6	6.4	1.5	2.0
N. Continental	2.2	2.1	2.0	7.0	7.4	7.7	6.7	7.1	7.4	7.9	8.5	8.7	3.7	2.0	2.0
Scandinavia	2.4	2.5	2.4	6.1	7.0	7.4	5.5	6.5	7.0	7.3	8.7	8.9	7.5	2.2	2.3
Mediterranean	1.9	2.4	1.9	5.7	6.5	7.1	5.1	6.1	7.2	6.3	7.3	6.6	15.1	6.1	3.2
Japan	2.5	1.1	2.1	7.1	7.2	7.4	6.7	7.0	7.2	7.6	7.9	7.8	2.3	0.3	-1.2
Total	**0.8**	**1.7**	**3.2**	**5.4**	**5.8**	**6.5**	**5.2**	**5.7**	**6.6**	**5.1**	**5.6**	**5.5**	**15.0**	**18.3**	**7.8**

Sources: Gwartney, Hall and Lawson (2010); World Bank (2011)

Table 3: Economic Growth, Panel Corrected OLS, 1980 - 2007

Period	**1980-2007**			**1995 - 2007**		
Model	**1.1**	**1.2**	**1.3**	**2.1**	**2.2**	**2.3**
Economic Freedom	1.589*** (0.359)	--	--	1.177** (0.415)	--	--
Economic Liberalism	--	0.763* (0.307)	0.569 (0.309)	--	0.512 (0.314)	0.437 (0.324)
Economic Governance	--	0.444* (0.191)	0.424* (0.179)	--	0.546* (0.241)	0.533* (0.222)
Inflation (l)	--	-1.433 (0.735)	-1.427* (0.705)	--	-0.529 (1.035)	-0.532 (1.088)
Net FDI	--	--	0.239*** (0.070)	--	--	0.174* (0.077)
Per Cap. GDP (l)	-0.555*** (0.152)	-0.646*** (0.177)	-0.465* (0.192)	-0.571** (0.182)	-0.783** (0.255)	-0.727* (0.279)
Constant	-3.373* (1.499)	4.102 (3.125)	3.495 (2.887)	-0.0001 (1.623)	3.874 (3.612)	3.028 (3.805)
rho	0.218	0.241	0.220	0.267	0.286	0.272
N	1,104	1,104	1,104	552	552	552
N(groups)	184	184	184	184	184	184
Avg. R-Squared	0.119	0.130	0.183	0.041	0.050	0.100

******p<0.001, **p<0.01, *p<0.05***

Standard errors in parentheses under coefficient estimates

Table 4: Economic Growth, Driscoll-Kraay Fixed –Effects Model, 1980 - 2007

Period	**1980-2007**			**1995 - 2007**		
Model	**4.1**	**4.2**	**4.3**	**6.1**	**6.2**	**6.3**
Economic Freedom	2.084*** (0.317)	--	--	1.866** (0.310)	--	--
Economic Liberalism	--	1.136*** (0.224)	0.845** (0.287)	--	0.756 (0.394)	0.701 (0.392)
Economic Governance	--	0.337 (0.233)	0.241 (0.206)	--	0726* (0.264)	0.638* (0.259)
Inflation (l)	--	-1.822* (0.730)	-1.971** (0.726)	--	-2.572*** (0.555)	-2.649*** (0.534)
Net FDI	--	--	0.274** (0.103)	--	--	0.069* (0.031)
Constant	-10.390*** (1.905)	-1.064 (3.228)	0.923 (3.518)	-8.628*** (1.981)	1.812 (3.708)	2.392 (3.647)
N	1,104	1,104	1,104	552	552	552
N(groups)	184	184	184	184	184	184
Avg. R-Squared	0.184	0.199	0.248	0.116	0.154	0.161

******p<0.001, **p<0.01, *p<0.05***

Standard errors in parentheses under coefficient estimates.