Freedom and the Global Emerging Middle Class

Abstract
The study examines the role of the political freedoms, rule of law and economic freedoms such as regulatory efficiency, open markets and limited markets in the growth of the global middle class through international business activity in 34 emerging markets during the period of 1994-2011 with 475 data points. Regression analysis and estimation of latent variables confirms that these dimensions of freedom are more critical than others in making these markets attractive locations for international business and how this in turn leads to domestic growth and thus growth of the middle class in these countries. The results also reveal the existence of a feedback loop, whereby the growing middle class becomes a driving force for further expansion of international business activity and economic growth.

Keywords: freedom; international trade; foreign direct investment; emerging middle class
INTRODUCTION

A vibrant middle class is widely recognized as a key to a stable and prosperous society. The many benefits of a strong middle class are sometimes referred to in the context of middle class values that seem to transcend nation state boundaries such as a focus on the future, savings, ownership and responsibility for property, and a strong desire to create a world of promise for the next generations (Ren, 2013; DeKoning, 2009). Hence, because of these emphasized values, the concept of the middle class remains a beacon for growth.

Middle class is an important group of consumers for businesses. In search for quality of life, they want better high quality products and services (Banerjee & Duflo, 2007). For many years, the business world was paying attention only to industrialized economies of North America, Western Europe and Japan (Cavusgil & Kardes, 2013a). However, the growing middle class in emerging markets is a topic that is rightfully receiving increasing attention. Of primary interest is the high growth rates of emerging economies and the potential of further growth that is expected to outpace that of highly developed economies (Maouawad, 2014; Court & Narasimhan, 2010; Scott, 2014). The middle class consumers in these markets are expected to buy smartphones and tablets at a higher rate than in the United States and Western Europe (Scott, 2014) where adoption is more widespread. Air travel in emerging markets such in Istanbul, Dubai, Jakarta, Bangkok, and Singapore are reporting double digit growth and are outpacing Western airport growth as defined by numbers of travelers (Maouawad, 2013). In the area of pharmaceuticals, demand for medicines in emerging economies is expected to grow more quickly than in industrialized economies (PWC Global, 2014). The broadening of consumption choices coupled with increasing awareness and acceptance of global and regional brands will continue to strengthen these economies through this growing engine of consumption (Steenkamp & de Jong, 2010). The emerging middle class in these economies have the potential to be a significant economic force in the coming decades, and potentially replacing Japan, North American and Western European economies as the leading drivers of the global economy.
A first step in understanding the middle class in emerging markets is of course to define the middle class. The various approaches researchers have used to define the middle class is therefore presented and compared. A definition is then selected that best fits the goal of our research question, namely, the focus on a rising per capita GDP which translates into the ability to make discretionary consumption choices. An important contribution of this article to the literature is this empirical examination of the freedom related drivers of the emerging global middle class in growth markets during an approximate 20 year period beginning 1994. The analysis covers a comprehensive group of 34 countries.

What is causing this seemingly sudden growth of middle class in emerging markets? Each country is unique, yet there are common drivers contributing to the growth of the emerging middle class. The question of what contributes to the growth of the middle class remains as a topic of interest among researchers. Harvey (2005) describes the middle as professional managerial segment that emerged from market liberalization reforms. Political, economic, and legal systems of emerging economies can expose multinationals to significant losses and negatively affect their operations there, and thus reduce their profitability. In contrast, positive changes in political, economic and legal institutions and practices can affect a market’s attractiveness for business and can connect its economy to the global market, and consequently avail its benefits (Robock, 1971). Cavusgil and Kardes (2013b) suggest that country specific factors such as political instability, corruption, ease of doing business, openness to foreign investors, protection of property rights, factors that are generally associated with political economy, should be carefully and seriously analyzed by foreign investors. This study proposes to exactly do that; it examines the developments in various dimensions of limited government, open markets, regulatory efficiency, rule of law, and political freedom in emerging markets and assesses their impact for enhancing international business activity.

Each country included in the analysis has a unique culture and history. However, there has been a general moving away from totalitarian political systems, centrally planned economic systems, and corrupt
legal systems with no or little property rights into freer systems that are identified as emerging democracies with market economies and more transparent rule of law with stronger enforcement of property rights. However, anomalies naturally exist within countries as to the pace and sequence of reforms. In China, for example, while substantial limits to individual political freedom continues, major economic reforms started in 1980s and China’s legal system is also gravitating toward one that is consistent with Western countries. The Soviet Union collapsed in 1991, which lead to significant democratic and economic reforms in Central and Eastern Europe. Communism has also collapsed in several Southeast Asian, African and some Latin American nations. In addition, several countries in Latin American and Southeast Asian countries with right-wing totalitarian governments have started to be replaced with democratically elected ones. It is also noteworthy that while these changes have been positive for development of international business, in the last 10 years there are some signs of reversals and set-back in Latin American and Russia. As such, a neat lock-step linear process toward greater freedoms does not exist within the changing political, economic, and legal systems of emerging countries.

In this context, there is continuing interest in better understanding origins of an emerging middle class and its impact for further international business activity. Additional empirical research is needed to help clarify these complex questions. This research therefore seeks to shed light on these relationships. What is the impact of enhanced freedoms and reform for the growth of international business and the rise of the middle class? How does growing middle class, once in place, loop back to affect continued international business activity?

**ECONOMIC GROWTH, EMERGING MIDDLE CLASS & INTERNATIONAL BUSINESS**

It is often argued that a country’s economic development is related to its political, economic and legal systems. Despite the long debate over the question of this relationship in the literature, it has not been possible to give an unambiguous answer. Certainly, innovation and entrepreneurship are considered
engines of economic growth (Grossman & Helpman, 1994). In particular, innovations in production and business processes lead to increases in the productivity of labor and capital, which boosts economic growth rates (Lewis, 2004). Innovation is also seen as the product of entrepreneurial activity. It is the entrepreneurial activity that commercializes innovative new products and implements new improved processes.

It has also been suggested that the economic freedom typically associated with a market economy generates greater incentives for innovation and entrepreneurship. In such economies individuals are free to try to make money out of a new product by starting a business and existing businesses are free to improve their operations through innovation (Hayek, 1989). A study that involved more than 100 countries provides the empirical evidence supporting this argument for a strong relationship between economic freedom and economic growth (Gwartnet, Lawson & Block, 1996). They found that the more economic freedom a country had, the more economic growth it achieved and the richer its citizens became. The reforms towards more economic freedom often involve a number of steps such as deregulation, privatization, and liberalization. Deregulation removes legal restrictions to the markets, operations of companies, and establishment of new ones. The result is regulatory efficiency. Through privatizations, the ownership of state-owned enterprises changes into private individuals, who have more powerful incentives for profits (Zahra, Ireland, Gutierrez & Hitt, 2000). This reduces government spending and consequently the need for taxation. In fact, Cebula & Mixon (2012) found that reduced fiscal freedom leads to a reduced rate of economic growth. The result is limited government, which is another important element of economic freedom. Lastly, liberalization involves reductions in tariff and non-tariff trade and investment barriers, so that there are reduced barriers to the free flow of capital, products and services across the borders, leading to open markets, the third dimension of economic freedom considered in this analysis.

Rule of law is considered as another requirement for a business environment conducive to innovation and entrepreneurial activity, thus economic growth (Murphy, Shleifer & Vishny, 1993; Maskus, 2000). A consistent legal system is expected for the well-functioning a market economy. In particular, this entails strong enforcement of property rights, and contract enforcement in an environment free of
corruption and organized crime. Without such protection from the legal system, businesses and individuals run the risk that the profits from their innovative efforts are expropriated, either by criminal elements or by the state. Corruption increases inefficiencies in government expenditures, distorts relative prices, and hampers economic growth (Ghalwash 2014; Aidt, 2011). The final dimension of the political economy of a country considered is its political system. The relationship between economic system and economic development is clear as outlined above. Similarly, freedom from corruption results in greater efficiencies and economic growth. Debate surrounds what kind of political system best supports a functioning market economy with a strong legal system (Hirshman, 1994; Przeworski & Limongi, 1993). Nearly 20 years ago, Barro (1996) found a weak and slightly negative impact of democracy on economic growth conditional on maintenance of the rule of law, free markets, small government consumption, and high human capital. Democracy is associated with the highly developed Western countries. Yet there are examples of totalitarian regimes that have fostered a market economy, stronger property rights protection, and have experienced significant economic growth such as China, South Korea, Taiwan and Singapore. However, totalitarian regimes elsewhere in Africa, Asian, and Latin America did not witness such growth. Given this, it seems likely that democratic regimes are far more conducive to long-term economic growth and only in well-functioning, mature democracies, property rights are truly secure (Olson, 1993). Democracy also ensures that in a healthy economy, more productivity is rewarded with higher incomes. In the former socialist systems in Eastern Europe “individuals were rewarded according to their political positions not to the economical productivities” (Salgür, 2013). In addition, a socialist system has shown to produce less self-reliance which hinders the entrepreneurial spirit (Bauernschuster, Falck, Gold & Heblich, 2012). Such reward structures result in market inefficiencies and result in a misallocation of valuable human capital. Similarly, as individuals are rewarded for their productivity, there tends to be more innovation what enhances productivity which in turn spurs economic growth. Even 20 years after the collapse of the Soviet Union, the transformation to a market economy is still incomplete with the state sector GDP at approximately 35% (Cooper, 2013) resulting in continued inefficiencies left over from a planned economy mentality.
These changes in the economic, legal and political systems in emerging markets not only contributes to domestic-market driven growth, but also have significant implications for international business. Positive changes in political economy reduces the risks foreign companies take when they engage in any type of international business activity, whether foreign direct investment (FDI) into or international trade with these countries. Reduced economic, legal and political risks in emerging markets’ business environment positively affects the profit and other goals of foreign businesses that are interested in doing business in these countries (Robock, 1971). Figure 1 describes the variables under consideration and the corresponding hypotheses show the expected linkages one would expect from the literature.

**Hypothesis 1a:** Economic freedom (limited government, open markets, and regulatory efficiency) leads to increases in international business activity in emerging markets.

**Hypothesis 1b:** Strong rule of law leads to increases in international business activity in emerging markets.

**Hypothesis 1c:** Political freedom leads to increases in international business activity in emerging markets.

There is a large number of empirical studies on the role of inward foreign direct investment for host countries’ economy. This literature has been comprehensively studied in de Melo (1997 and 1999). Despite some contrarian evidence (Temiz & Gökmen, 2014), the fundamental argument is that foreign direct investment, especially in emerging markets, is seen as an important source of capital (Chowdhury & Mavrotas, 2006), and plays an important technology transfer role (Asiedu, 2002; Chakrabarti, 2001). Both capital increase and technological transfer improves the labor productivity in emerging markets, and causes economic growth (Gui-Diby, 2014). A free market view and an internalization argument for FDI suggest that international production would be distributed across the world according to comparative advantages. Similarly, multinational companies by engaging in FDI would disperse the production of goods and services so that they can be produced in the most efficient way. Such efficient use of limited resources then leads to economic growth.

Insert Figure 1 here
Similarly, many studies analyzed the relationship between international trade and economic growth (Sachs & Warner, 1995; Frankel & Romer, 1999). These studies generally suggest that as countries engage in more international trade, they tend to enjoy higher economic growth rates. In particular, Frankel & Romer (1999) found that on average 1% increase in the ratio of trade to gross domestic product, leads to at least one-half percent increase in per capita incomes. The idea behind this relationship is that international trade allows countries to specialize in industries that they are most efficient, and thus leads to better uses of scarce resources and more output. Hence, we hypothesize the following:

**Hypothesis 2:** International business activity leads to economic development in emerging markets.

Lucas (1993) raised a puzzle on the relationship between income inequality, or in other words, absence of large middle class, and economic development. He argued that in 1960s South Korea and the Philippines were similar in many economic measures such as per capita income, population, and school enrollment. However, they had substantially different economic growth experiences with Korea growing on average 6% per year and the Philippines growing at about 2% per year. In an effort to clarify these differences, Benabou (1996) pointed out that the distribution of income was substantially more unequal in the Philippines, where the middle class was more or less obsolete. This and other empirical studies of Alesina & Rodrik (1994), Persson & Tabellini (1994), and Perotti (1996) show the negative relationship between inequality in income distribution (i.e. absence of middle class) and economic growth experiences. Kharas (2010) argues that with the exception of Japan, rapid economic growth has not always been driven much by a large domestic middle class. Hence, there are economic growth experiences without emergence of a middle class. Since in developing countries, there is higher rate of return to relatively scarce capital, owners of capital are expected to increase their wealth. In contrast, the abundance of unskilled labor in emerging markets suggests the need to save and accumulate income over longer periods of time. In this context, in order for a middle class to emerge, this accumulated capital needs to be spent on education of their off-spring. As per capita GDP increases, more discretionary income is available for sustaining and developing human capital in the next generation and seeking out a higher quality of life. The result is a middle class –professional managerial segment of the population that emerges from economic growth.
resulting market liberalization reforms (Harvey, 2005). While short-term growth may increase income inequality in a developing country, a middle class would only emerge as a result of sustained economic growth. Hence, we formulate the following hypothesis:

**Hypothesis 3:** Sustained economic development increases the size of middle class in emerging markets.

The emerging middle class affects consumption of apparel, durables, and personal products (Cavusgil & Cavusgil, 2012). Given the extra disposable income, the middle class consumers have beyond satisfying the necessities of life, they are in search for quality. They want better things in life (Banerjee and Duflo, 2007). In particular, Cavusgil and Kardes (2013a) propose that the middle class households aspire comfort and the symbols of western brands. In fact, it is quite possible that the demand for such brand name products and services from other countries in emerging countries will be very high, as Cavusgil and Kardes (2013b) suggest that due to deprivation of global standards in products over the years in emerging countries led to immediate acceptance of foreign brands with higher quality and more variety.

Access to these products can be achieved through more international business activity with emerging markets. Kharas (2010) argues that the middle class group provides the impetus for increased trade between national states. Given that imported items, particularly those coming from more advanced countries have higher implied quality and prestige, this would further fuel exports to satisfy the demands of the increasingly discerning consumers in emerging markets. In particular, Hummels & Klenow (2002) show that most of the international trade expansion has been occurring at the extensive margin—that is through the expansion of new higher quality products rather than greater trade of existing products. Increased international business activity is not necessarily limited to international trade. Murphy, Shleifer & Vishny (1989) emphasize the willingness of the middle class consumer to pay a little extra for quality as a force that encourages product differentiation and thereby feeds investment in production and marketing of new products. Consequently, more foreign direct investment inflow will result in more consumer choice. This virtuous cycle of a growing middle class is reinforced and further sustained through even more international business activity. This feedback loop is stated as the final hypothesis:
**Hypothesis 4:** A growing middle class leads to further increases international business activity.

**DATA AND METHODOLOGY**

**Dependent Variables**

*Middle class*

The middle class is an often vaguely defined set of individuals in the middle of a system of social stratification. The concept of social stratification has led to the idea of social classes and social economic status with the key determinants being education, occupation, and income (Kamakura & Mazzon, 2012). However, there remains considerable debate about how to measure and interpret this social class, and what it means as a social construct. One recent definition is that the middle class is “salaried workers who do not own the means of production and whose major function in the social landscape is the reproduction of mainstay vitality of society, culture and capital” (Cavusgil & Cavusgil, 2012). Yet, from the standpoint of employing a quantitative measure for this construct in international business, income is likely the most important defining variable since it affects purchasing power and the ability to make choices in the consumption of goods and services. In general, to state the obvious, the middle class in a society is seen as not being poor yet not being rich. In this way, the middle class is seen as maintaining a relatively comfortable lifestyle within a relative temporal and geographic context. Beyond meeting the necessities of life such as housing, healthcare, and education, the middle class has a certain amount of discretionary income that can be used in pursuit of pleasures of life. In building a construct to measure this group of people, one needs to keep in mind the purpose of the study. In this article, we are interested in measuring this group that contributes to economic growth of the country where they reside through international business linkages. While there are certainly other ways of measuring the middle class (Banerjee & Duflo, 2007), considering the objective of this paper, we focus on the ability to participate in consumption activities as measured by per capita GDP.
Some practitioners use metrics that often involve typical middle class spending characteristics such as home and vehicle ownership or leisure expenditures, or even electronics consumption such as cell phones, and televisions. However, data on these is rather scarce, and not historically available for all countries to conduct a comprehensive study such as this.

Within this consumption framework, relative or absolute amounts can be used in defining the middle class. Some researchers such as Easterly (2000) and Birdsall, Graham & Pettinato (2000) take a relativist approach. They define it as those between 20th and 80th percentiles of the consumption distribution, or between 0.75 and 1.25 times the median income per capita income within a particular country. In contrast, several others take the absolute approach. Banerjee & Duflo (2007) use two alternative measures of daily income of $2-$4 and $6-$10. Bhalla (2009) finds this level too low, and defines it as those with an annual income of $3,900 or higher in purchasing power parity terms. This lower limit corresponds to $10.60 per day or higher, without setting a higher limit. The World Bank (2007) also uses an absolute definition but they also set a higher limit: Those between the mean income level in Brazil and that in Italy in 2000 price levels. These correspond to roughly income levels between $10 and $50 per day. Lastly, in another article by Kharas (2010) the middle class is defined as those with an income between $10 and $100 per day in purchasing power parity (PPP) 2005 price levels. This is consistent with Cavusgil & Kardes (2013a) who suggest that in defining the middle class across countries, differences in costs of living need to be accounted for. While at first, this may appear to be a wide range, according to the relativist approach middle class is normally a significant proportion of the population. To this effect, Cavusgil & Kardes (2013a) suggest that the middle class is not necessarily a homogenous cluster, and include affluent and mass segments. They also suggest that relative measures more reliable, such as one they propose where at least 30% of total income available spent on discretionary purchases. However, we do not have such data on the emerging countries analyzed here. GSU-CIBER middle class Scorecard (Cavusgil & Kardes (2013a) developed using this idea is only available from 2005 onwards. These boundary figures in the middle class range by Kharas (2010) correspond to average poverty lines in Portugal and Italy, and twice the median income level in Luxembourg, respectively. Considering, that this
definition excludes those defined as poor in poorest advanced countries, and the rich in the richest advanced country, we also adopt this definition of middle class as the most appropriate in this study.

As in Sala-i-Martin (2002), the World Bank’s micro household survey data are used in this research to compute the proportion of the middle class in overall population. From these surveys, household income distribution was obtained and inputted into PovCal software of the World Bank. This software estimates the distributional parameters of a quadratic Lorenz curve. The remaining parameter is the mean of the distribution, which also comes from the household surveys. Given these parameters, the PovCal software generated the proportion of the population living below a given threshold. The proportion of the population in the middle class was obtained as the difference between the proportion of the population with expenditures below $100, and above $10 per day, or below $3,040 and above $304 per month, respectively, since there are on average 30.4 days in a month. These figures are in year 2005 constant US$ and therefore take into account prices changes over the years and represent same buying power during the period of analysis. These figures also take into account the cross-country price differences since they are in PPP.

When alternatives are provided for a country, urban data is used since urban population will be more connected with the global economy than the rural population. Cavusgil and Kardes (2013a) suggest that urban households provide a more complete picture of countries’ attractiveness to marketers. Since every country does not implement the household survey data every year, data for missing years is completed by assuming a constant rate of change in the middle class proportion between two years with available data. Approximately 49% of the middle class data has been generated in this way, which implies that on the average countries conducted the survey every other year. Since the proportion of the middle class in population is not highly variable in yearly frequencies, assuming the trend data for missing years is expected to produce reliable estimates.

**International business activity**

A main theme in this article is to explore how positive changes in political freedoms, economic freedoms, and the rule of law of a poor country can provide security and confidence in that economy. Multinational
companies then engage in international business there, generate economic growth and eventually the middle class emerges. We also propose there is a feedback loop: The growing middle class would create further potential for more business for the multinationals and lead to more international business activity. This international business activity takes place through foreign direct investment into these countries, as well as both exports to and exports from these markets. Data on inward foreign direct investment is obtained from UN Conference on Trade and Investment Database. To measure the significance of such activity, inward foreign direct investment stock as a percentage of gross domestic product is used. The significance of exports to and exports from emerging countries is captured with the ratio of the volume of these (exports to and exports from) to gross domestic product. In computing this measure, trade data is obtained from UN Comtrade. Gross domestic product data used in all of these three ratios came from UN National Accounts Main Aggregates Database.

**Economic development**

While Sen (1999) criticized its use as limiting, per capita gross domestic product is a widely used measure of the level of economic development a country has reached over time. Since the focus of this article is on consumption, per capita GDP adjusted for the purchasing power parity is used in the analysis. To obtain a measure of sustained economic development, the average of current and the past three year’s per capita GDP is used. The source for this data is the World Development Indicators.

**Independent Variables**

**Economic freedom**

As discussed earlier, a country’s economic development is a function of its political economy. Some generalizations can be made about how economic systems, in particular economic freedom can provide the incentives for innovation and entrepreneurship and consequently to economic growth. The Wall Street Journal and the Heritage Foundation provides an annual rating of different dimensions of economic freedom. They measure the economic freedom on 10 factors grouped in four categories: Rule of law, limited government, regulatory efficiency and open markets. The ratings for each of these factors are on a
scale of 0-100, with 100 corresponding to highest economic freedom. Rule of law dimension will be discussed under the legal system below.

Within the limited government dimension, fiscal freedom is a composite measure of indirect and direct, marginal and overall taxation as a percentage of gross domestic product. Overall government spending factor measures the burden imposed by all levels of government expenditures, including various entitlement programs. Higher indices in this factor imply less government spending.

Tariff and non-tariff barriers are assessed under trade freedom. Non-tariff barriers include quantity, price, regulatory, investment, and customs restrictions that interfere with free trade of goods and services. Trade freedom is an element of open markets dimension along with investment freedom and financial freedom. Countries with no constraints on the flow of capital, where individuals are free to move their resources in and out of different investment options, internally and across the borders, fare well in investment freedom. Lastly, financial freedom is an assessment of the efficiency of the banking sector, and financial institutions’ independence from government control or influence.

Business freedom is considered under the regulatory efficiency. It is measure of government’s efficiency in regulating business, which includes procedures, time and cost associated with starting and closing a business as well as obtaining licenses. Labor freedom is an assessment of the regulatory framework of a country’s labor market. Unfortunately, the Heritage Foundation added this factor much later in 2004; therefore it is omitted from this analysis to avoid significant loss of data points. The last factor under this dimension is monetary freedom, which is a measure of price stability that includes both inflation and price controls that distort free market activity.

In assessing all of these factors, the sources of information used by the Wall Street Journal and the Heritage Foundation primarily include the Economist Intelligence Unit, the US Department of Commerce, US Department of State, various news articles and other sources reputable depending on the topic.

**Rule of law**

Earlier discussions suggest that entrepreneurs are reluctant to risk capital for new ventures, especially in foreign markets that they are not familiar with, without rule of law safeguards. To measure this construct,
rule of law dimension of economic freedom by the Heritage Foundation is used. The property rights component is an assessment of the legal system of a country for freedom to accumulate private property, protection of this property, and enforcement of these laws and contracts, including an assessment of potential for expropriation of this property. A rating of 100 implies that private property is guaranteed; there is efficient and quick enforcement of contracts, and there is no corruption or expropriation. Another factor within this dimension is freedom from corruption. Corruption introduces risk, reduces economic vitality, and increases costs. Together these factors are used to assess the impact of the legal system in economic growth of the countries analyzed. Higher indices in this factor imply less corruption.

**Political freedom**

As mentioned earlier, one can find examples of significant economic development in democracies that provide political freedom to its citizens, as well as in totalitarian governments that control all power in a single entity. Considering the engine of economic growth, entrepreneurship implies a certain degree of freedom, it seems likely that a construct that measures political freedom, such as political rights and civil liberties, would be useful in assessing the role of political system in this framework.

Freedom House provides an annual comparative assessment of such rights and liberties since 1972. Their ratings of countries are based on established standards that are used by main institutions monitoring trends in democracy worldwide. The methodology used in ratings is derived from the Universal Declaration of Human Rights, and assesses the rights and freedoms enjoyed by ordinary individuals rather than privileged elite. Hence, the ratings go beyond the laws to consider the actual practices of the country. Their sources include news articles, academic analysis, reports from nongovernmental organizations and individual professional contacts.

A country is assigned two ratings on a scale of 1-7 for political rights and civil liberties, with 7 corresponding to smallest degree of freedom and 1 the highest. For political rights, a rating of 1 is therefore given to countries that enjoy wide range of political rights, including free and fair elections, where the political parties are competitive, and opposition enjoys real power, and interests of minorities are well represented. For civil rights, countries with a rating of 1 enjoy freedom of expression, assembly,
association, education and religion. They have an established and fair legal system that ensures rule of law, and allow free economic activity. These countries strive for equality of opportunity for everyone including minorities. In this study, these ratings are used to measure political freedom in the countries analyzed. However, in the analysis, the ratings by Freedom House have been reverse coded to make these and their correlation with and impact to other variables more intuitive to the readers by assigning a rating of 1 to countries with lowest freedom and 7 to countries with highest freedom.

**Control Variables**

The literature suggests other variables that would make a country relatively more attractive for a multinational company. These have been traditionally include the relative abundance of certain immobile assets tied to particular locations. Hence, most theories suggest that multinationals prefer to invest in production facilities to take advantage of foreign markets’ endowment of resources which create such locational advantages (Dunning, 1988). Dunning (2009) later revised the list of variables influencing location decisions and organized these factors under resource-, market-, efficiency- and strategic asset-seeking. Note that the variable used in the analysis for the level of international business activity is its share in GDP. Hence the size of the market is already controlled. To take the other factors into account in explaining the level of international business activity, we will include two control variables in our analysis. These are share of total natural resources rents as percent of the GDP, and tertiary school enrollment as percent of the gross population. These are intended to represent factors leading to resource- and efficiency-seeking foreign direct investment. No particular controls have been added to account for strategic-asset seeking FDI since FDI inflow into emerging countries are not particularly driven by this motivation. In contrast, the FDI outflow is particularly driven by this desire (Cui, Meyer, & Hu, 2014; Matthew, 2006; Child & Rodrigues, 2005). The data source for both is the World Development Indicators.

Similarly, one can find several factors that the literature identified leading to economic development. These macroeconomic growth models suggest that growth comes from adding more capital, labor and also from changes in total factor productivity coming from new technology (Solow, 2002). Note that the variable used in the analysis for the level of economic development is per capita GDP. Hence, the
addition of labor is already controlled. Other than foreign direct investment, additional capital can originate domestically. To capture the significance of this domestic direct investment (DDI), ratio of gross domestic investment stock as percent of GDP is used similar to the variable used to compute the significance of FDI. The source for the annual data is World Bank national accounts database. To compute the stock of DDI as percentage of GDP, annual data dating back to 1985 has been accumulated over the years assuming a depreciation rate of 10%. Total factor productivity data is obtained from the Conference Board Total Economy Database.

**Countries Analyzed**

The focus in this study is the middle class in the emerging markets. Emerging markets are generally defined as countries that exhibit some characteristics of developed markets but are not yet considered developed. They tend to be in the process of rapid economic development. Over the years, analysts in various organizations developed their own list of such markets. These include 25 countries, in the emerging economies list by the International Monetary Fund, 16 emerging market global players by Columbia University, 10 advanced and 12 secondary emerging markets by FTSE Group, 21 countries in Morgan Stanley Capital International’s list of emerging markets, 20 countries that are classified as emerging by the Economist, another 20 by Standard and Poor’s, yet another 20 in Dow Jones’s list, and 22 in Russell list and 44 in BBVA research. While there is significant overlap across these lists, this study includes those markets that are considered emerging by at least two of these organizations. This list therefore excludes Greece, Hong Kong, Iran, Israel, Saudi Arabia, Singapore, Slovenia, Sudan and Tunisia that are considered as emerging by only one of these organizations. This process resulted in an initial list of 42 emerging countries.

The data on middle class is the most limiting factor both in terms of country coverage and period of analysis. For eight of these countries, there was no data to ascertain the size of the middle class. Hence, this further narrowed the data set to a final grouping of 34 countries listed in Appendix 1. The periods given in parentheses show the availability of middle class data. The time period analyzed was further reduced to a starting year of 1994 for all countries analyzed since that is the first year of ratings on
economic freedom, despite the availability of political freedom, economic growth, and international business activity data. With a few years missing at the beginning or end of the time period for some countries, the study has overall 475 data points.

Table 1 provides the correlation matrix among these variables used in testing the article’s hypotheses. Note that there are several variables used in measuring political freedom, rule of law, limited government, and open markets dimensions of political economy in the emerging markets. Naturally, as countries reform their political economy, these variables change together causing some multicollinearity. Particularly, the correlation between political rights and civil liberties under political freedom construct, that between property rights and freedom from corruption under the rule of law construct, and financial freedom and investment freedom under the open markets constructs are quite strong. Therefore, in the regression analyses that follow, only one of these variables is included to represent a particular dimension of political economy to avoid lack of robustness and incorrect coefficients that may result from multicollinearity. In particular, civil liberties is used to represent the overall political freedom; freedom from corruption is chosen to represent the rule of law; investment freedom is used to capture degree of market openness, and fiscal freedom and monetary freedom are used to represent the dimensions of limited government and regulatory efficiency, respectively. Furthermore, the correlation between the three types of international business activity (inward FDI, exports and imports) are also strong. This is probably a result of the fact that when countries engage in trade liberalization, they tend to simultaneously implement liberalization of foreign investment as well. Hence, to avoid multicollinearity, inward FDI is used to represent the level of international business activity. In the subsequent regression analysis, variance inflation factors (VIF) are computed to check for remaining multicollinearity issue among independent variables. VIF values vary between 1.20 and 1.756. All are less than 5 –indicating no such issue that would have biased the results.

Methodology
The model includes several endogenous latent variables. To estimate the model, two-stage least squares for latent variable technique developed by Bollen (1996) and Bollen & Paxton (1998) is used. Compared to conventional maximum likelihood method for structural equation models, this technique offers computational simplicity, better performance in small samples and several other advantages including no need for any distributional assumptions for independent variables. Several applications of this technique for latent variables can be found in the literature (Farrell, 2000; Oczkowski & Farrell, 1998; Smith, Oczkowski, Noble, & Macklin, 2003).

In this technique, first scaling variables for each latent variable is selected. This implies that factor loadings for these variables are set equal to one. The scaling variables are expected to best reflect the latent variables theoretically and empirically. Then, a two-stage least squares regression is performed where scaling dependent variable is regressed against scaling independent variables, where non-scaling item indicators of the independent variables are used as instruments. If any not-latent observed variables enter directly as independent variables, such as control variables, then these appear as both right-hand-side variables and as instruments. In other words, they act as their own instruments. When structural equations model is non-recursive, the feedback case as in the model of this article, only the non-scaling items of the right-hand-side variables which are not dependent variables in other equations can be employed as instruments.

The structural equations model in Figure 1 lends itself to three such two-stage least squares estimation. The first one international business activity is the latent dependent variable, which allows for testing of Hypotheses 1a, 1b, 1c as the Hypothesis 4 for the feedback loop. Economic development is the dependent variable in the second estimation to test for Hypothesis 2. To test for Hypothesis 3, the last estimation involves the middle class latent variable as the dependent variable. The independent scaling and control variables as well as the non-scaling variables used as instruments are listed in Table 2. Hausman test for exogeneity of instrumental variables is performed in each of the three estimations.

The choice of scaling variables for latent variables is as follows: FDI is chosen to best represent the international business activity as the risks associated with the political economy of a country most
affects the foreign investment into that country rather than short-term activity such as exports and imports. Civil rights dimension of political freedom is most closely associated with the individual freedom for economic activity, thus used as the scaling factor. Corruption has implications on risk and cost of doing business. Therefore, freedom from corruption is chosen to be the scaling factor for rule of law dimension of political economy. For consistency with the choice of FDI as the scaling factor for international business activity, investment freedom is selected for the open markets dimension. For the regulatory efficiency dimension, monetary freedom is used as scaling factor, since it measures distortions to free market economy. Finally, fiscal freedom, which assesses taxation, is assumed to best represent the limited government dimension.

**ANALYSIS AND RESULTS**

Figure 2 depicts the changes observed in various components of economics freedom, and relevant elements of rule of law such as property rights and corruption. The vertical axis is a normalized index ranging from 0 to 100 where the higher rating implies more economic freedom, such as strong protection of property rights, less corruption, limited government spending, fiscal, financial, trade and investment freedom. This figure very nicely illustrates how economic systems have a lot of gray areas between centrally planned and market economies. While the overall rating shows a clear improvement during late 1990s to 2011, not every element of economic freedom was getting better. Fiscal, trade, and monetary freedom ratings show substantial improvements. Financial, business and investment freedoms have initially worsened until early 2000s after which improved back to their level in early 1990s. While property rights rating had worsened until early 2000s, it has been more or less stable since then. Freedom from corruption has improved in late 1990s and then again in late 2000s. When groups of these elements are considered together, while markets were generally more open; there was regulatory efficiency; and there was more freedom from government intervention, it seems the situation with regard to the rule of law got worse.
Figure 3 illustrates the spread of democracy using the ratings of political rights and civil rights by Freedom House averaged for the countries analyzed in this article. According to the figure, throughout the 1970s and in early 1980s, while there was a very slow improvement, the average was between 3 and 3.5 for both political rights and civil liberties (1=low, 7=high). This implies that during that time period, these countries experienced moderately restricted political rights and civil liberties, protection of some political rights and civil liberties and neglect of others. There is a visible improvement that started in late 1980s and continued until early 2000s. During this time period, the average rating for both improved from about 3.5 to 5, reflecting more political rights and civil liberties being provided in the presence of political corruption, and limits of functioning of political parties and opposition groups, or military influence on politics. After early 2000s, political freedom in emerging markets seems to be levelled off with a slight worsening, potentially capturing the negative developments in Latin America, Russia and elsewhere.

As predicted, the reforms and improvements in political economy led to increased income levels in the emerging markets analyzed. Figure 4 shows their averaged per capita GDP using their population as weights. The income levels nearly tripled in nearly three decades, increasing from about $1,000 to about $3,000 per person. This implies about 3.33% real GDP growth in excess of the population growth rate, which is impressive.

This growth in income levels led to emergence of a significant population of middle class in the emerging markets. This is illustrated in Figures 5, 6, and 7 which includes all 34 countries in the study. In these figures, countries are grouped in three categories to observe the differences in their experiences. In the first group, you can find countries that started with about 5% of their population in middle class in early 1980s, with the exception of China. This group includes countries that experienced substantial increases in the size of their middle class over the period analyzed, ending with between 15% and 50% of the population in the middle class. China is included in this group due to similar phenomenal increase in
the middle class population that started at about 0% in 1980 and ended with 16.9% in 2009, with much of
the increase occurring in 2000s, as only 1.91% of its population was middle class in 1999. Other success
stories in this group include Thailand (from 4.4% in 1981 to 18.8% in 2010), Turkey (from 15.1% in 1987
to 39.4% in 2009), Mexico (from 9.7% in 1984 to 32.2% in 2010), Brazil (from 17.9% in 1981 to 33.9% in
2009), Malaysia (from 20.6% in 1984 to 44.6% in 2009), Chile (from 19.3% in 1987 to 45.7% in 2009)
and Morocco (from 3.1% in 1984 to 8.4% in 2007). These and other countries with similar experiences are
presented in Figure 5.

Insert Figure 5 here

The second group of countries in Figure 6 include countries that started at nearly 0% middle class
and had limited success in expanding their middle class during this period ending between 1% and 5% of
their population in middle class. Examples include Sri Lanka (from 0.9% in 1985 to 3.9% in 2009) and
Philippines (from 1.5% in 1985 to 4.5% in 2009), which are the most successful ones in this group. India
(from 0.2% in 1983 to 1.6% in 2009), Indonesia (from 0.1% in 1984 to 1.8% in 2007) and Vietnam (0.2%
in 1992 to 1.8% in 2008) also had some success, while others like Egypt (from 2.2% in 1990 to 2.3% in
2008) did not experience substantial increases in their middle class.

Insert Figure 6 here

Figure 7 shows primarily the formerly socialist countries. Their experiences are quite different and
noteworthy for the focus of this article. Years of socialism led to more equal distribution of income and
much larger middle class in these countries, ranging from about 50% to 93% in the first year of analysis.
Transition into democracy, market economy and strong protection of property rights has not been easy and
initially led to poverty as illustrated in substantial decreases in the size of their middle class. But later, after
stability is reached, their new political and economic system and rule of law led to expansion of middle
class as in the first group. Venezuela (from 33.2% in 1981 to a low of 9.9% in 2002 and later at 19.8% in
2006) and Argentina (from 67% in 1986 to a low of 20.9% in 2002 and later at 69.5% in 2010) are also
included in this group due to similar U-shaped post-socialist dip experience they had in the size of their
middle class. Some other examples are Poland (from 49.4% in 1985 to a low of 31.9% in 1992 and later at
51.4% in 2011), the Czech Republic (from 88.5% in 1988 to a low of 67.7% in 1993 and later 82.5% in 1996), and Latvia (from 93.1% in 1988 to a low of 12.6% in 1993 and later at 65.1% in 2008). Bulgaria (from 85.9% in 1989 to a low of 5.3% in 1997 and later at 31.8% in 2007) and Romania (from 56.6% in 1989 to a low of 1.2% in 1994 and later at 16.1% in 2010) had the sharpest decreases in their middle class during this transition period.

As hypothesized in this article, international business activity plays a catalyst role in emergence of middle class in emerging markets due to changes in their political economy making them more attractive markets for international business, which is later reinforced with the needs of the middle class for higher quality goods and services coming from developed countries. In Figure 8, this increased international business activity can be observed. The plot depicts shares of inward FDI stock, exports and imports in GDP of the countries analyzed averaged using their GDPs as weights. While these ratios were more or less stagnant in early 1980s, changes in the political economy made them more attractive for international business in late 1980s and in 1990s. It is noteworthy that while export and import ratios were at first in decline in 1980s, the FDI ratio was showing a moderate increase in late 1980s. As Figure 5 illustrated, much of the increase in middle class occurred in 2000s, and this figure shows that the rate of increase in international business activity picked up at a higher rate in 2000s, with FDI activity leading the changes, and exports and imports following. The figure also shows that while the 2008 global economic crisis hit all types of international business activity, soon FDI, exports and imports continued to increase for these emerging markets due to their continued attractiveness due to their growing middle class.

While the above illustrated collective experiences are generally in support of this article’s hypotheses, they do not tell the whole story and certainly does not explain each individual countries’ experiences, cross-country differences, and impact of various independent variables.

To consider these, three two-state least squares regressions are performed. The results are presented in Table 2. In all regressions, the adjusted $R^2$ and F-statistic imply that significant portion of the
variation in dependent variables are explained by the variables of the models. Furthermore, the Hausman-statistics are all low with p-values of 1.00 implying that the instrumental variables used are exogenous. Hence, this regressions produce consistent estimates, and does not suffer from the endogeneity problem and the bias of ordinary least squares.

Insert Table 2 here

The first one has the international business activity as the dependent variable, and is used to test the implications of various dimensions of political economy (Hypotheses 1a, 1b, and 1c) and the feedback of growing middle class on international business activity (Hypothesis 4). There is various levels of support or lack of support for the Hypotheses 1a, 1b and 1c. There is no support that more political freedom is needed for increased levels of international business activity. In fact, the opposite seems to be the case as the coefficient of civil liberties, the variable representing political freedom, has a negative and statistically significant coefficient. It appears that multinationals are not necessarily looking for fully-functioning democracies, but possibly political stability, in initially choosing the markets. This was also suggested in Alesina, Ozler, Roubini & Swagel (1996). An interesting rerun of this analysis that includes only the more advanced emerging markets with a per capita GDP of $5,000 or higher shows that the coefficient of the political freedom variable becomes positive (21.3) and statistically significant. Rule of law does not seem to be significantly affecting the international business activity. While the coefficient of the scaling variable for this dimension of political economy is positive, it is not statistically significant. This is a bit surprising as one would assume that corruption would increase costs of production and thus reduce incentives for business activity. However, note that these countries were undergoing reforms in their political economy, and increased level of corruption could be seen as necessary for speedy approval of these reforms by government officials, investments, etc. Furthermore, this result seems to be consistent with the view that fast economic development tends to come hand in hand with increased level of corruption, and a reduction in corruption is more necessary for sustained economic growth after political economy reforms are over, as suggested by Pranab (1997). In fact, in a separate analysis on more advanced emerging markets, the coefficient of the freedom from corruption variables becomes more positive (0.44),
while still insignificant. Lastly, the support for the hypothesis on more economic freedom for more international business activity varies with each different dimension under economic freedom. Limited government, particularly fiscal freedom, seems necessary for international business activity. Under open markets dimension, investment freedom appears to strongly support increased levels of activity. While this is not surprising for foreign direct investment, the potential reason for its significance for exports and imports could be that the multinationals use emerging markets as low-cost production sites to primarily cater to the needs of developed markets through trading. More regulatory efficiency for more international business activity has no support in the data. Monetary freedom under this dimension has a negative and statistically insignificant coefficient.

It is noteworthy that there is strong support for the feedback of middle class on international business activity (Hypothesis 4), as the coefficient of the middle class variable is positive as expected and statistically significant. It suggests that one percent point increase in the share of middle class in overall population increases ratio of FDI in GDP by 17%. This is a very significant increase in foreign investment at a much higher rate than the high rate of economic development in these emerging countries. The results suggest that with the discretionary income the middle class have, they would want to consume both a larger variety of products but also higher quality products. Since products of developed countries is often associated with higher quality, this implies more international business activity.

This regression also includes couple control variables for the level of international business activity. For both natural resources and skilled labor the coefficients are positive as expected and statistically significant, explaining other reasons for attractiveness of emerging countries for international business.

In the second regression in Table 2, there is strong support for the Hypothesis 2. As expected, international business activity positively and statistically significantly affect the economic development in emerging markets, possibly driven by the efficient use of resources due to specialization resulting from more participation in globalization. In particular, one percent point increase in ratio of FDI in GDP increases per capita GDP by $90. This regression also includes couple of control variables leading to
growth. As expected both domestic investment and total factor productivity leads to economic
development, while the coefficient for the latter is not statistically significant. It is noteworthy that foreign
investment leads to more growth than domestic investment. This can be explained with the technology
transfer, management skills transfer and the associated increases in labor productivity that comes with
foreign investment.

From the last regression in Table 2, it is evident economic development in emerging markets
increase the size of their middle class, supporting the Hypothesis 3. As expected the coefficient of the
economic development variable is positive and statistically significant. In particular, $1 increases in per
capita GDP increases the proportion of middle class in overall population by 0.05%.

**DISCUSSION**

**Contribution to the IB research**

The study of international business is necessarily concerned with the globalization of markets, production,
and consumption. The growing middle class in emerging markets will play a significant role in how
businesses anticipate and respond to changing political and economic freedoms and the strength of the rule
of law as these variables affect foreign direct investment and international trade. Ours is first
comprehensive study of its kind involving over 30 emerging countries covering their economic
development over the last two decades. Some of the results are of confirmatory in nature of previous
studies on individual or smaller group of countries’ experiences in shorter periods of analysis. For
example, we find that limited government and open markets were positively correlated with international
business activity in these emerging economies confirming Grossman & Helpman (1994) and Hayek
(1989). Our study also supports the notion that the relationship between democracy and attractiveness of a
location for multinationals is complex in emerging markets (Hirschman, 1994). Additionally, we find that
the need for democracy while not necessary initially, becomes more important at higher levels of economic
development. Surprisingly, rule of law was not significantly correlated with international business activity
as has been found by other researchers (Mauro, 1995). Similar to the need for democracy, we also find that freedom from corruption and strong protection of property rights becomes more of a necessity for emerging countries to further continue with their development once they become low middle income countries. We found that international business activity directly and positively affects the emerging country economic development. Interestingly, we find that such international business activity is much more effective in the development of a country than its home-grown domestic gross capital forming activities.

We believe the most significant contribution of this article is the confirmation of a feedback loop in the process of economic development through the linkages between middle class and international business activity. Accordingly, positive changes in the political economy kick starts the process by making a market for attractive location for international business, and this leads to economic development and emergence of a middle class. With their discretionary income, the middle class is drawn into consuming higher quality goods and services produced by the multinationals, leading to more international business activity and further economic development and so on.

Another significant contribution is the computations of the size of middle class in emerging countries. We show 12 emerging countries had significant growth in the size of their middle class increasing it from 5-20% of their population to 20-50% from 1990 to 2010. We also find some other emerging countries that started at practically non-existing middle class had much more difficult time in creating a middle class, which is important for their sustained economic development. One other interesting observation of these computations is the peculiar experience of transitional countries, which moved away from centrally planned economies with authoritarian communist governments. These countries started with a pretty large middle class under their old political economic systems, which shrank significantly during the transition period of 1988 to 2000 to market economies, liberal political systems with strong rule of law, and bounced back up to having large middle class once their transition was over.

Managerial implications
Our research shows the importance of assessing the political economy of a market before engaging in international business activities there. Managers must be cognizant of the short term realities and the challenges of emerging markets, yet they must also assess how these same markets will look in the next 10 and 20 years. For example, a lack of civil liberties, or a weak rule of law may be aspects of the political economy that seem to indicate high risk at first. Yes, there is inherent risk in emerging markets, but the growth of a strong middle class and its subsequent positive impact on foreign direct investment and international trade bode well for observant and patient companies. These initial risks may also be construed as natural steps in the move toward a longer democratization process and these countries will evolve to a more stable setting in the coming decades (Wesson, 1990). In the presence of such political economy risks, given the strategic importance of being a first mover in emerging countries, such as brand recognition, creation of switching costs, and benefiting, cost advantages associated with experience curve, it is important to assess the political economy of potential markets and identify which ones will offer the attractive conditions for international business activity.

In the initial stages of economic development and emergence of middle class, managers may have to deal with corrupt and authoritarian governments. Under these circumstances, developing a working relationship with local governments is important, but doing so in an ethical way will be tricky. Multinationals should develop a strong and effective ethical standards of practice to be successful in such environments. It is also important to note and follow home country laws, such as Foreign Corrupt Practices Act of the U.S and similar ones in other countries, despite what is observed and seem to be a routine practice by managers in emerging countries. Also within this framework, given the finding that international business activities such as FDI generates more growth than similar domestic efforts, managers of multinational companies should carefully use this leverage in negotiating with local governments for concessions.

While initially multinationals may be attracted to the emerging countries in seeking their natural or human resources, or as low-cost production sites, as these lead to economic growth and emergence of a sizeable middle class, the nature of international business activity with emerging countries may change.
They may become more of marketing-seeking nature. At this point, it is important to review product offerings as the middle class in emerging countries will demand higher quality products associated with brand names.

An interesting finding in this research was the change in middle class in transitional emerging countries that may have implications in other emerging markets with a change in their political economy from authoritarian to democratic systems. These countries first experienced a dramatic drop in the artificial command economy middle class, but then as the economy begins to reset to a freer and more democratic basis, a new middle class reemerged. Patience must therefore be exercised as this process unfolds. Early entrants to countries emerging from authoritarian rule can enhance brand knowledge and preference, can build supply chains, and begin working within new regulatory environments to prepare for the consumption demands of the new market based emerging middle class, whose preferences and needs may be different than the former middle class.

McKinsey Global Institute’s estimations of the size of the middle class is around two billion consumers. Our analysis predicts that approximately 650 million of these consumers reside in the 34 emerging countries covered in this study, with nearly 230 million in China, followed by Russia, Brazil, Argentina, Mexico and Turkey. Other emerging countries with large middle class population are presented in Table 4. Given the rate of increase in the middle class consumers from emerging countries, it is reasonable to predict that the majority of the three billion global middle class by 2030, according to Goldman Sachs, will be in emerging countries. Hence, multinationals need to pay attention to the specific needs to the middle classes in these emerging countries as they become significant markets.

**Limitations and future research**

The data used in the study are necessarily less than ideal in terms of consistency across countries and across time. While the study had 475 data points and a good representation of 34 emerging market economies, some important countries were excluded due to lack of data. The study concentrates on an approximate 20 year period from 1994-2011. While there is an increasing availability of trade, investment, and political economy data, our study was limited to this period due to missing or incomplete data from the
decades of the 70s and 80s and early 90s. If there was missing data, a constant rate of change was used to
trend the data to the next data point. A final limitation pertains to defining the middle class in emerging
markets. There are divergent measurement strategies based on differing opinions of what set of parameters
best identify someone as middle class. However, we believe our consumption-centric definition was most
appropriate for this study.

This topic of a growing middle class in emerging markets will very likely show increasing interest
and discussion in the coming decades. Future research will benefit from more complete data sets that will
help refine hypotheses and the ability to discover relationships among variables related to the emerging
middle class. Further, the growth or shrinkage of the middle class in emerging markets and the impact this
has on economic growth and international business will continue to be valuable questions for researchers.
An interesting future research is the question of what is next for emerging countries after carrying out
political economy reforms. The kick-start to economic development that started with these reforms is
shown to generate growth and middle class through international business linkages and feedback into
further international business activity. But for how long will this feedback loop feed further growth last or
will these countries be stuck in a middle income trap? How these developing economies reach the level of
development is an interesting question for future researchers.

REFERENCES

International Handbook on the Economics of Corruption, 3-12.

Economic Growth, 1: 189-211.


Cooper, J. 2013. The Russian economy twenty years after the end of the socialist economic system. *Journal of Eurasian Studies*, 4: 55-64.


Figure 1. The model
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</table>

Note: At N=475, any correlation coefficient larger than 0.059 in absolute value is directionally significant at 90% level of confidence.

**Bolded variables are used as a measure for the construct.**
Figure 2. Economic freedom and rule of law in 34 emerging markets (0 = low; 100 = high)
Figure 3. Political freedom in 34 emerging markets (1 = low; 7 = high)
Figure 4. Average per capita GDP in constant 2005 US$ in 34 emerging markets
Figure 5. Countries with substantial increases in middle class proportion
Figure 6. Countries with small increases in middle class proportion
Figure 7. Middle class proportion in formerly socialist countries
Figure 8. Inward Foreign direct investment stock and international trade of 34 emerging markets as percentage of GDP
**Table 2. Two-stage least squares regression results**

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent/Control variables</th>
<th>Instrumental variables</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>International business:</strong></td>
<td>Limited government (scaling):</td>
<td>Limited government (non-scaling):</td>
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<tr>
<td>FDI</td>
<td>+11.4 (2.44) Fiscal freedom**</td>
<td>Government spending</td>
</tr>
<tr>
<td></td>
<td>Open markets (scaling):</td>
<td>Open markets (non-scaling):</td>
</tr>
<tr>
<td></td>
<td>+0.39 (3.07) Investment freedom***</td>
<td>Trade freedom, Investment freedom</td>
</tr>
<tr>
<td></td>
<td>Regulatory efficiency (scaling):</td>
<td>Regulatory efficiency (non-scaling):</td>
</tr>
<tr>
<td></td>
<td>-0.04 (-0.57) Monetary freedom</td>
<td>Business freedom</td>
</tr>
<tr>
<td></td>
<td>Rule of law (scaling):</td>
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</tr>
<tr>
<td></td>
<td>+0.10 (0.56) Freedom from corruption</td>
<td>Property rights</td>
</tr>
<tr>
<td></td>
<td>Political freedom (scaling):</td>
<td>Political freedom (non-scaling):</td>
</tr>
<tr>
<td></td>
<td>-3.71 (-3.98) Civil liberties***</td>
<td>Political rights</td>
</tr>
<tr>
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<td>Middle class (scaling):</td>
<td>Middle class (non-scaling):</td>
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<tr>
<td>Adj. R²: 0.723</td>
<td>+0.172 (2.08) Middle class**</td>
<td>Middle class</td>
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<tr>
<td>F-statistic: 183.2</td>
<td>International business (control):</td>
<td>International business (control):</td>
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<tr>
<td>Hausman-statistic: 133.2</td>
<td>+0.46 (5.31) Natural resources***</td>
<td>Natural resources, Skilled labor</td>
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<td></td>
<td>+0.32 (5.73) Skilled labor***</td>
<td>Economic development (control):</td>
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<tr>
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<td>DDI, Total factor productivity</td>
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<tr>
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<td>International business:</td>
<td>International business (non-scaling):</td>
</tr>
<tr>
<td>Per capita GDP</td>
<td>+89.3 (10.1) FDI***</td>
<td>Exports, Imports</td>
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<td>Economic development (control):</td>
<td>Economic development (control):</td>
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<tr>
<td></td>
<td>+10.3 (5.31) DDI***</td>
<td>DDI, Total factor productivity</td>
</tr>
<tr>
<td></td>
<td>+8.67 (0.27) Total factor productivity</td>
<td>International business (control):</td>
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<tr>
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<td>Natural resources, Skilled labor</td>
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<tr>
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<td>Limited government (non-scaling):</td>
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<td></td>
<td></td>
<td>Government spending</td>
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<td>Open markets (non-scaling):</td>
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<td></td>
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<td>Trade freedom, Investment freedom</td>
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<td>Regulatory efficiency (non-scaling):</td>
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<td>Business freedom</td>
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<td>Rule of law (non-scaling):</td>
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<td>Property rights</td>
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<td>Political freedom (non-scaling):</td>
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<td>Adj. R²: 0.673</td>
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<td>Hausman-statistic: 184.5</td>
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<td><strong>Middle class:</strong></td>
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<td>Economic development (non-scaling):</td>
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<tr>
<td>Middle class</td>
<td>+0.05 (57.3) Per capita GDP***</td>
<td>Per capita GDP</td>
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<td>Economic development (control):</td>
<td>Economic development (control):</td>
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<td>DDI, Total factor productivity</td>
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<td>International business (control):</td>
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<td>Natural resources, Skilled labor</td>
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<td>Limited government (non-scaling):</td>
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<td>Open markets (non-scaling):</td>
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<td>Regulatory efficiency (non-scaling):</td>
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<td>Business freedom</td>
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<td>Rule of law (non-scaling):</td>
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<td>Property rights</td>
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<td>Political freedom (non-scaling):</td>
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<td>Political rights</td>
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<td>Hausman-statistic: 97.1</td>
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Note: Numbers in parentheses are t statistics. Coefficients marked with ** and *** are significant at 95% and 99% level of confidence respectively.

### Table 3. Summary of results

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<tr>
<th>Hypothesis</th>
<th>Description</th>
<th>Result</th>
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<td>H1a</td>
<td>Economic freedom (Limited government) → More international business activity</td>
<td>Supported (+ and sig.)</td>
</tr>
<tr>
<td></td>
<td>Economic freedom (Open markets) → More international business activity</td>
<td>Supported (+ and sig.)</td>
</tr>
<tr>
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<td>Economic freedom (Regulatory efficiency) → Not supported More international business activity</td>
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<tr>
<td>H1b</td>
<td>Rule of law → More international business activity</td>
<td>Not supported for all emerging Not supported for advanced emerging (+ but insig.)</td>
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<td>H1c</td>
<td>Political freedom → More international business activity</td>
<td>Not supported for all emerging Supported for advanced emerging (+ and sig.)</td>
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<td>H2</td>
<td>International business activity → Economic development</td>
<td>Supported (+ and sig.)</td>
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<td>H3</td>
<td>Economic development → Larger middle class</td>
<td>Supported (+ and sig.)</td>
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<tr>
<td>H4</td>
<td>Larger middle class → More international business activity</td>
<td>Supported (+ and sig.)</td>
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### Table 4. Top 10 emerging markets with largest middle class in 2012

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<tr>
<th>Country</th>
<th>Middle class population</th>
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<td>230 million</td>
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<td>Russia</td>
<td>80 million</td>
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<tr>
<td>Brazil</td>
<td>70 million</td>
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<tr>
<td>Mexico</td>
<td>40 million</td>
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<tr>
<td>Argentina</td>
<td>30 million</td>
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<td>Turkey</td>
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<td>Ukraine</td>
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<td>India</td>
<td>20 million</td>
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<tr>
<td>Malaysia</td>
<td>15 million</td>
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</table>

Source: Authors’ own estimations

### Appendix. Countries in the analysis and period of available data