

## Revisiting Neoclassical Economic Growth: A Survey in the Literature

By Mayank GUPTA <sup>†</sup>

**Abstract.** During the second half of the twentieth century economists have build newer models of economic growth that consider policy influences of growth and divergent outcomes among countries. These models address issues concerning economic growth, operation of financial markets, trade policy, government expenditures, and taxation. In this essay we have revisited the interdependence of political and economic institutions, taking the neoclassical growth model of Solow (1956) as a point of departure, which maintains that long run economic growth can be explained by capital accumulation, population growth and technological progress. We first discuss the evolution of the neoclassical school of economics in a historical context, and the role of various institutions in engendering economic growth. Subsequently the role of government spending, political stability, property rights and special interest groups (SIG's) affect economic growth have been discussed, and how these institutions can explain different countries to grow at divergent rates and achieve different levels of wealth.

**Keywords.** Political Economy, Economic Growth, Income Inequality, Technological Progress, Human Capital, Innovation.

**JEL.** P12, P26, P45, P51.

### 1. Introduction

**P**olitical Economy or Economics is a study of mankind in the ordinary business of life; it examines the part of the individual and social action which is most closely connected with the attainment and with the use of the material requisites of well being”, [Marshall \(1890\)](#). This classic definition provides the linkage between microeconomic study of production, consumption, demand and supply of resources in an economy, with the law, customs, government, and distribution of national income and wealth within a population. We therefore try to segregate political economy into two branches namely the first related to production and consumption by individuals in an economy, which [Adam Smith \(1776\)](#) referred as “The natural effort of every individual to better his own condition when suffered to exert itself with freedom and security, is so powerful of principle, that it is alone and without any assistance is capable of carrying on society to wealth and prosperity”, and the second pertaining to the role of government in maintaining full employment, and price level stability. However the meaning of freedom needs to be analysed in Smith’s context, as ‘Freedom’ is the fundamental tenant of any civilized society. Smith referred freedom as “An individual’s willingness to pursue its own self interests in a society”, this is further elaborated by the Harm Principle proposed by [Mill \(1859\)](#) “The sole end for which mankind are warranted, individually or collectively, in interfering with the liberty

<sup>†</sup> University of Verona, Faculty of Economics, Venice, Italy, ✉. mayank.gupta@univr.it

## Journal of Economics and Political Economy

*of action of any of their number is self protection. That the only purpose for which power can be rightfully exercised over any member of a civilized community, against his will is to prevent harm to others. His own good either physical or moral is not a sufficient warrant*", this further buttresses, that individuals should be free to pursue their self-interests, however they must not create harm to others. This view is also referred as the '*libertarian*' view of organizing the society. This view is further emphasized by Riccardo (1817) who in his theory of comparative advantage criticized '*Mercantilism*', as an economic doctrine that advocates government control of foreign trade '*Protectionism*', in lieu of ensuring economic prosperity and military security of the state. The theory of comparative advantage suggests that what matters is not absolute production ability, but ability in producing one good to another.

In contrast to this the Marx's view of organizing the society, wherein the society will be governed by the working class, which he refers as a workers state, and this in turn will be replaced by a classless and stateless society referred as communism Marx (1867). However in this form of organizing the society, the government owns all the factors of production in an economy, in order to do so it first has to resort to coercion, and force to take these resources from people who own them. This is in striking contrast to the ideas of Adam Smith, wherein he refers to '*freedom and security of an individual*', as the basic premise of organizing a society. Further Hayek (1944) argued that in order for communism to succeed, it requires central economic planning and that such planning will in turn lead to totalitarianism. Hayek posited that a central planning authority would have to be endowed with powers that will have a profound impact on the social life of an individual and will eventually control an individuals interaction in the society, because the knowledge required for a centrally planned economy is inherently decentralized, and would need to be brought under control.

Further with the disintegration of The Union of Soviet Socialist Republic (USSR), and the misallocation of resources, because of lack of information due to the unavailability of a well functioning price-market mechanism in a '*centrally planned economic system*' which essentially makes it inefficient and open to malaise, demonstrates the weaknesses of the socialist planned economic system, even in light of the arguments of Marx of a working class society. Therefore, it may be appropriate to consider that the '*communist*' theory proposed by Marx, remains an inefficient model of organizing societies. However on the other hand, the '*capitalist*', model of organizing a society, which relies heavily on the private ownership of resources, wherein the production of goods and services are driven primarily by individual self interests, and benefits immensely from the productive activities that are unleashed by a free enterprise system, which is governed by an '*invisible hand*', Smith (1776) by far still remains the most efficient way in organizing the society. Further in a complex modern economy there is a vast amount of distinct goods and services that are being produced, for an equally large proportion of consumers and enterprises. The information transmission mechanism of demand and supply of resources, in any economic system other than the market capitalism, would indeed surpass the capacity required to process the information. Mises (1922), Hayek (1945) further exemplified this point by arguing that the price mechanism serves to share and synchronize local and personal knowledge, allowing society's member to achieve diverse, complicated ends through a principle of spontaneous self-organization. Hayek contrasted the use of price mechanism with central planning; arguing that the former allows for rapid adaptation to changes in particular circumstances of time and place. He viewed an economy as a constellation of innumerable individual economies in a market, and used '*Catallaxy*' as a term to define the self-organizing system of voluntary co-

## Journal of Economics and Political Economy

operation. This view is best illustrated by the economic calculation problem by [Mises \(1920\)](#) and later by [Hayek \(1935\)](#) wherein Mises argued that the pricing system in a socialist economy is deficient in efficiently allocating resources because if a public entity own all the means of production, as proposed by [Marx \(1867\)](#), then no rational prices can be obtained for capital goods, as they would be merely internal transfer of goods rather than objects of exchange unlike final goods. Since both Mises and Hayek saw the price mechanism in a decentralised economy as an indispensable communication network, firstly because individuals possess useful knowledge concerning preferences towards one good over another, second this knowledge is widely dispersed, and individuals may not realize its importance, or may have no incentive to transmit this information, finally this information is probably of no use to other individual, if it is not presented in a form that allows for meaningful comparison of value (for instance money prices act as a common basis of comparison). Further [Read \(1958\)](#) masterpiece on how a pencil is made, indeed presents the complexity involved in making a pencil, and how individuals cooperative self interests triumph over any form of planning, and how they collaborate to fulfil their distinct objectives, and thereby increasing the overall welfare of the society.

Therefore based on the above discussion, the role of the government in a society should be limited to providing public goods and services. This too is warranted only in cases wherein the market mechanism in allocating resources may not function appropriately. The role of the government is without preclude necessary to protect the sovereignty of the country from foreign invasion, an exception considered even by [Smith \(1776\)](#) too. Therefore the central role of the state should be to maintain the rule of law, with as little arbitrary intervention as possible. By doing so not only it fosters economic growth, but also increases the overall standard of living for its people [Hayek \(1944\)](#). The simplest definition of economic growth is the increase in real gross domestic product (GDP). Growth has been rising over most of the modern history; however there have been enormous differences in the standards of living across different parts of the world<sup>2</sup>. Large changes in relative income in countries such as Japan, from the end of World War II to around 1990; as well as in the newly industrialized countries (NICs) of East Asia – South Korea, Taiwan, Singapore and Hong Kong starting around 1960; and ultimately China, starting around 1980, are noticeable examples of growth miracles. While Argentina and many of the countries of sub-Saharan Africa are often referred to as growth disasters, since their average incomes have remained close to subsistence levels while average world income has been rising steadily. Why are growth rates so different in different parts of the world? Cross-country comparisons of per capita gross domestic product (GDP) have been the main testing ground of growth theories in recent years.

In this context, this paper sheds light on the political economy approach to economic growth, making a survey of the existing literature. We attempt to discuss the main political channels influencing growth, from the lens of various researchers in this field. This essay classifies the main political determinants of growth into two categories one focusing on the pure economic growth theory: capital accumulation as a primary engine of growth; and the other on technological innovation as the main engine of growth. In the first category the political determinants of growth are considered as economic policies mainly affecting private returns to investment. Fiscal policies play the most important role through taxation on capital, income transfers, redistributive policies, etc. The second category considers economic policies influencing the creation of new technology.

<sup>2</sup> [Romer, 1996](#)

## Journal of Economics and Political Economy

The structure of the rest of the paper is segregated wherein; Section 2 is devoted to establish a link between economic growth and political economy. The economic growth theory is briefly introduced, with a focus on exogenous versus endogenous growth theories. The development of new economic theories of growth, were influenced by an increase in the political determinants. Section 3 discusses some political tools influencing growth, and posits that capital accumulation is what determines growth. This section is further segregated into two parts, wherein the former considers the relationship between inequality and growth, and the latter highlights political instability. Subsequently the role of property rights and myopic governments is also discussed. Finally Section 4 examines ways through which policy-makers influence the incentives to innovate, wherein technological progress is the main engine of growth. Finally, conclusion is presented which summarizes the theoretical and empirical works that has been discussed.

### 2. Linking Economic Growth Literature and Political Economy Theory

According to the neoclassical growth model of Solow (1956) and Swan (1956), an economy's long-run growth rate is determined exclusively by the rate of technological progress, which was considered as an exogenous variable, consequently economic growth is predominantly a result of external forces. The model traces back its origin to the neoclassical school of economics, wherein Hicks (1939) incorporated the principles of classical microeconomics developed on the ideas of 'Demand and Supply' as proposed by Adam Smith & David Ricardo, to that of the macroeconomic school of thought developed principally on the ideas of John Maynard Keynes (1936) also referred as Keynesian economics. The neo classical school emphasizes on technological progress as the key determinant of economic growth in an economy. However it is imperative to discuss the reasoning behind technological advancement, in order to enhance our understanding of the long run economic progress. The reasoning stems from the fact that in an open market economy, entrepreneurs employ capital and labour in order to produce goods and services, whereas individuals' make decisions based on rational preferences about consumption and savings. The macroeconomic institutions namely banks and financial institutions aim is to direct national savings, and any savings borrowed from abroad (current account deficit), towards investments in plant, equipment and human capital, that offers the greatest increase in nation's output per hour (Rajan & Zingales 2003). The output per hour on average rises when obsolescent facilities (with low output per hour) are replaced with facilities that embody cutting edge technology (with high output per hour). This process improves the overall standards of living for a nation as a whole (Rajan & Zingales 2001). Since we have scarce savings in the society, and these savings need to be utilized to finance productivity enhancing processes, therefore entrepreneurs undertake risks in order to produce advance technology, there cannot be any better description of this as the one provided by the 19th century English historian William Cunningham "A man will not risk what he has in trade, except for the prospect of very large gains, if he is likely to be robbed by pirates, or to be oppressed by the government if he is successful in business" Jones (1981 p. 85). However in doing so, we drop the obsolescent techniques and move to more productive means of production, and thereby rewarding the risk takers temporarily with 'monopoly' rents. In this process the downside remains that by moving from the obsolete methods of production to the cutting edge technological innovation, there grows immense dissatisfaction among the people who lose employment, and

are subject to temporary economic distress. This process that makes the market economy move forward is being termed as Creative Destruction [Schumpeter \(1942\)](#), even though people in general tend not to like the destruction part, but in the absence of the destruction side, i.e. eliminating the obsolete capital, economic growth cannot be achieved. The mainstream view of exogenous technology was first challenged by [Romer \(1986\)](#) and [Lucas \(1988\)](#) with the formulation of endogenous growth theory. The main concern was about the inadequacy of the neoclassical growth model as a tool to explain the determinants of long-run growth. The endogenous growth theory has tried to overcome this shortcoming by building macroeconomic models out of microeconomic foundations.<sup>3</sup>

In the early literature on endogenous economic growth, capital accumulation was considered as a primary engine of growth, and technological progress can be viewed as a form of capital accumulation. However [Mankiw et al. \(1992\)](#) presented a further extension of the [Solow \(1956\)](#) growth model, wherein they considered human capital accumulation, which indeed was excluded from the textbook Solow growth model and by doing so they tried to explain that for a given rate of human capital accumulation, higher saving or lower population growth leads to a higher level of income and henceforth to higher level of human capital accumulation. Therefore when human capital accumulation is taken into account, it can explain the greater impact on income with the accumulation of physical capital and population growth. Further the authors have considered the correlation between human capital accumulation, and savings and population growth rates. This might create a bias while estimating the coefficients on savings and population growth. The authors have used a cross country comparison of 122 countries, and the empirical findings suggest that higher savings rate lead to higher income in the steady state, which in turn leads to a higher level of human capital, even when the rate of human capital is kept constant; As against the textbook model, which considers higher population growth lowers income, since the capital is spread across the worker population. This is in contrast to the empirical results, which suggest that human capital must also be spread across the workers population. Therefore higher population growth lowers measured total factor productivity. Henceforth the authors concur that the Solow model is consistent in explaining the growth theory, by means of empirical evidence, if one considers not only the importance of physical capital, but also that of the human capital.

In addition to the above, technological progress arises from decisions to save and invest, and economic growth can be reduced to private accumulation decision. If a society saves a larger fraction of national income, the pace of technological progress rises, permitting a higher rate of economic growth to be sustained over time. As a consequence of this new setting, the new growth theory revived interest in long-term economic growth as an objective of economic policy, highlighting that any economic policy affecting private returns to investment has effects on growth. Further [Sachs & Warner \(1995\)](#) have emphasized on the efficiency of economic and political institutions to address the issue of economic growth and convergence among the rich and poor countries. They have provided a cross-country evidence of 135 countries to buttress their claim that economic convergence cannot be explained solely on the basis of technology or human capital ([Solow 1956](#)). But instead can be better explained by the inefficient economic institutions leading to

<sup>3</sup> In the late 1970's, some economists called for models in which all aspects of the model equation were derived from consistent foundations in terms of optimizing behaviour (micro foundations). In particular, the Lucas' critique (1976) encouraged macroeconomists to build micro foundations for their models. He argued that to predict the effects of a change in economic policy, it is necessary to model parameters which govern individual optimizing behaviour, leading to an emphasis on dynamic optimization.



## Journal of Economics and Political Economy

absence of protection of property rights, protectionist trade policies, and foreign exchange controls. The authors for their study have considered the time period from 1970-89, to test whether economic convergence applies to the given countries following appropriate economic policies. The authors have segregated economic policies into two sub parts; the first part focusing on the protection of property rights, and the second one pertaining to assimilation of the economy with international trade. The study results are in line with the hypothesis, with the only exception of China, wherein the country has violated on all the necessary conditions for efficient economic and politic institutions. But still it has managed to grow at a healthy pace, owing to the post 1978 reforms orchestrated by Deng Xiaoping, this can be attributed to the “*two track approach*”, practised by the Chinese politicians, wherein the government moved to a market based economy, by decontrolling the peasant farming labour market from state controls, which eventually constituted seventy five percent of the labour force, while maintaining a strong hold on the state owned sector comprising of eighteen percent of the work force. This kind of economic structure which indeed is a hybrid system encapsulating central planning, and market economy is highly undesirable, and can lead to macroeconomic instability by means of asset prices bubbles, and ‘*zombie*’<sup>4</sup> organizations in the future. The authors conclude that convergent growth can be achieved by all countries in an open economy, that adhere to a reasonable set of political and economic policies, with the absence of protectionist measures namely trade quotas, export monopolies, or inconvertible currencies (See also [Bhagwati 2008; 2009](#)).

In addition to the above mentioned view points on endogenous growth theory, researchers have focused their attention on the distinction between technological knowledge and capital. The process of technological innovation has been analysed as a separate activity from saving. Wherein researchers have dissected the innovation process into sub processes, and by analysing the structural details, they strive to explain how laws, institutions, customs, and regulations affect individual’s incentive and ability to create new knowledge and profit from it.

[Aghion & Howitt \(1992\)](#) make use of Schumpeter’s theory of creative destruction, by encapsulating the factors of obsolescence into the endogenous growth theory; the authors make an attempt to explore industrial innovation that improves the quality of products. One of their claims is that individual innovations today are motivated by the prospect of monopoly rents in the future, but those rents are not perpetual and will last only until the next innovation occurs. The creative destruction effect, therefore, embraces the idea that expectation about more research in the future discourages research at the present. However there exists little empirical evidence to support this claim [Jones \(1995\)](#) carried out empirical analysis of U.S. growth rates from 1880-1987, and further analyses fourteen OECD countries from two different time periods 1900-1987, and 1950-1988. The results appear in striking contrast to the increase in per capita growth rates, stemming out from the endogenous growth literature. Further the empirical results contradict the claim of endogenous growth models, that a permanent increase in investment rates will increase growth rates forever, instead they only rise for utmost eight to ten years.

Both these branches of the endogenous growth theory offer a new perspective

<sup>4</sup>The term was coined by Edward Kane to explain the debacle of the USA S&L thrifts in 1989-91, wherein the natural link between debt and equity claims against a firm, and the riskiness of the assets they support is lost. Thereby both type of securities trade principally not on the earning power of the firm’s own resources, but on the implicit safety net provided by the government in the form of guarantees.

on how economic policy can interact with economic growth, arising from a number of political issues that affects technological innovation and reinforcing the claim that political factors and institutions are correlated with long-run economic growth. Taxation of capital and public investments are two examples of policy instruments that clearly affect individual's or firm's private rate of return on investment; Whereas economic policies influencing the efficient allocation of resources within an economy, such as protectionist policies on international trade, product and labour markets, state controlled enterprises are likely to affect the incentives to innovate. However while considering these determinants of economic growth, there exists a strong case to analyse the economic environment under which these determinants act, stemming from the riccardian view of '*comparative advantage*', wherein countries must specialize in producing goods and services at a lower marginal and opportunity cost over one another (Milner 1999; Garrett 2000). Henceforth they both can benefit by trading with each other, to the extent they have different relative efficiencies. This essentially means that there should not exist any trade barriers namely trade restrictions, quantitative/capital controls (Neely 1999), government controlled entities, monopolies, subsidies, state aids, or any other government assisted program that distorts competition, and henceforth leads to misallocation of resources. Therefore by doing so countries compete in a global economic environment, wherein rational economic agents buy goods and services from producers that offer them at the lowest marginal cost. This view dominated the abolition of government regulated markets in lieu of protecting consumer interests, since market mechanism allowed entrepreneurs to produce innovative technology that essentially lowered down the marginal cost of production, and with increasing competition allowed economic agents to make informed consumption and investment decisions, and thereby led to efficient allocation of resources in the economy. This dominant view has been the basic tenant of classical economics, and after the Second World War, and the high inflation of 1970's was strongly advocated by Friedman (1962).

The rest of this essay illustrates these different perspectives by considering the political economy side of growth, on one hand when capital accumulation is the key growth factor, and on the other hand, when growth is driven by the creation of new knowledge.

### 3. Capital accumulation as an engine of growth

#### 3.1. Government and return in aggregate investment: The fiscal policy channel

A vast body of literature on growth relies on the claim that growth is driven by the expansion of capital stock, which in turn is determined by individual saving decisions. According to Friedman et al. (1950) the main objective of fiscal policy in order to achieve economic stability must be based on the premise that government tax revenues must be higher than government spending in periods of high employment in the economy, thereby avoiding budget deficits. Since government affects business activity in an economy, by means of payment of wages to government employees, interest payments to bond holders, and pension payments to the elderly, all of this constitutes income that can be used to buy consumption goods and services from businesses. Further in order to run its day-to-day activities government needs to procure goods and services from businesses. In order to finance these activities the government raises money by issuing debt, and by income generated through taxes. However taxes capture funds that businesses may have spent on plant and equipment, or consumers may have spent on goods. Therefore tax collection reduces the market of business and thereby lowers

employment and prices; while government expenditure counteracts this process since it expands the market and thereby generates employment, and increases prices. Further it needs to be analysed how government distributes revenues by means of transfer payments, and not by the relative size of government revenue and expenditure. Since transfer payments can have detrimental effects on an economy, by means of their sheer composition, in case of *'unemployment benefits'*, it needs to be ascertained if the benefits necessarily reach the poorest, or do they discourage people from accepting job offers, and thereby making labour redundant. [Alesina & Rodrik \(1994\)](#) show how distributional considerations affect the choice of growth, bridging the political economy literature on majority voting on tax rates and endogenous growth models. They focus on the functional distribution of income between labour and capital. In this context, tax revenues provide a public good necessary for private production; therefore tax on capital affects capital accumulation and growth. Under the main assumption of a majoritarian election system, the median voter theorem predicts that the views of the politicians in office reflect the median voter's view. The authors use this theorem as a benchmark to study the relationship between income distribution and growth; the author's finding suggests that inequality encourages the implementation of growth-retarding policies. Henceforth in cross country comparison inequality in the distribution of income, wealth or land is negatively correlated with growth.<sup>5</sup>

In line with these results, [Benabou \(1996\)](#) states that the economy's growth rate falls in the presence of interest groups' rent-seeking abilities and a gap between rich and poor. The author claims that income inequality does not matter per se, but inequality in the relative distribution of earnings and political power has a detrimental effect on economic growth rate. This view is further supported by [Grossman & Helpman \(1994\)](#) who have developed an equilibrium model that considers the political contributions that various interest groups must make to support the equilibrium trade policy choices. In order to do so, the authors discuss the shape of trade policy, and henceforth endogenous protectionism in a representative democratic system, being influenced by the participation of interest groups in the political process. The authors have considered politicians as maximizing agents who pursue their own selfish interests rather than act as benevolent agents seeking to maximize aggregate welfare. The authors have constructed the model based on the *'political support'*, which is based on welfare that designated interest groups; derive from the chosen policies, and the dead weight loss that the policies impose on the society at large. They focus predominantly on special interest groups because of their ability to make contributions, which politician's value for their possible use in the election, and henceforth provide them a nobler position in the eyes of the government. The special interest groups represent the interests of a given industry. The government therefore sets the policy, which indeed is a weighted sum of aggregate social welfare and contributions. However a clear link between an individual interest group and the election outcome cannot be established. Rather the groups are incentivized to make contributions by the mere chance of influencing policy. It is this politician's receptiveness towards campaigns contributions, which makes what the authors refer as *'Protectionism for sale'*. The authors conclude that even though government objective must be to transfer income in the most efficient manner, the model implies on the contrary that lobby groups support institutions that constrain the government from transferring income in the most inefficient manner. Further [Rajan & Zingales \(2000\)](#) have developed a two period model in the context of complete information, and have analysed the impact of redistribution of

<sup>5</sup>Persson and Tabellini, 2000.



interchangeable resources arising from contractible actions, has on the total amount wasted in rent seeking activities and henceforth on the overall efficiency. Unlike [Grossman & Helpman \(1999\)](#), the authors have focused their attention on analysing the institutional design wherein institutions have an effect on direction of transfer, size of endowments, nature of productive opportunities and the returns in acquiring bargaining power. The authors have successfully demonstrated that a cooperative action among parties that clearly generates social welfare is unattainable especially in the presence of inequalities of opportunities or endowments available to each of them, limited resources and in the absence of frictionless credit markets.

[Bartels \(2005\)](#) provides an interesting explanation of political disparities, the author analyses the divergent responsiveness of U.S. senators to the preferences of wealthy, middle-class, and poor constituents. The results confirm the hypothesis that senators appear to be considerably more responsive to the opinions of affluent constituents than to the opinions of middle-class constituents. This is further extended by [Ansolabehere et al. \(2002\)](#) who have discussed the case of redistricting US state legislative districts in the mid 1960s, based on the principle of 'one person one vote', thereby eliminating unequal representation and the resulting unequal distribution of public money for state expenditures. The author's findings indicate that apportionment of legislative seats determines the distribution of political power in legislatures and the resulting allocation of government resources. Thereby refuting the preconceived notion that unequal representation in general does not affect public spending, arising from effects of representation on levels of spending. However the true effect of representation means the proportionate distribution of funds, rather than on the overall amount of government spending.

Although the idea that inequality is detrimental for growth seems to be quite plausible, it has not received the necessary attention from empirical studies. [Partridge \(1997\)](#) provides evidence about the heterogeneity, concerning different stages of economic development, by analysing a cross-sectional dataset of 56 countries as used by [Persson and Tabellini \(1994\)](#). The presence of heterogeneity raises the question whether the results of the latter can clearly explain the average effect of inequality that is not uniform while comparing advanced countries and less developed countries. Moreover, these results are not robust over time. All this means that the negative inequality-economic growth relationship claim fails to find any robust empirical correlation.

The large empirical evidence on the importance of fiscal policies in determining growth reflects some difficulties in measuring variables that theory predicts are relevant for growth. Further there are limitations in the existing cross-section data on income distribution, both in terms of availability and in terms of their quality and therefore acts as a handicap for researchers. [Easterly & Rebelo \(1993\)](#) describe the empirical regularities connecting fiscal policy variables, development level and growth rate of a given country. According to the empirical findings, the development level of a country matters when considering cross-country differences in growth. Specifically, poor countries rely heavily on international trade taxes, which indeed are a protectionist measure, in order to suppress foreign imports. While income taxes are significant in developed economies, in order to increase tax revenues, the scale of an economy, as measured by its population, is likely to influence fiscal policies. The authors provide empirical evidence supporting that an increase in the population size leads to a decrease in the share of trade tax revenues and an increase in the share of income taxes.

The theoretical literature supporting the endogenous feature of the fiscal policy choice is distinguished into two branches: the one that studies optimal fiscal policy under the assumption that government seeks to maximize the welfare of the

## Journal of Economics and Political Economy

representative agent<sup>6</sup>, and the one adopted in this essay, which considers fiscal policy as the outcome of a political process. A final consideration relying on the political economy approach is whether democracies and non-democracies implement different policies. Several empirical studies postulate a different relationship between equality and growth in democracies and non-democracies. In order to address this issue, [Perotti \(1996\)](#) uses democracy as a dummy variable in a reduced form regression, and documents evidence that the association between inequality and growth is stronger in democracies. However, the democracy effect does not seem to be very robust. Furthermore, high correlation between the level of GDP per capita and the democracy dummy variable make it hard to distinguish an income effect from a democracy effect in the relationship between income distribution and growth.

### 3.2 Political instability channel

The basic intuition about why political instability can hurt growth is that economic policy uncertainty has a direct negative effect on private investment. Higher instability not only drives down public investments but also reduces growth<sup>7</sup>. Nevertheless, many commentators have recently argued that uncertainty about taxes; government spending and other policy matters deepened the recession of 2007-2009 and slowed the recovery<sup>8</sup>.

Political instability can be measured essentially according to two approaches: it can be represented by executive instability, denoting the propensity to observe government changes, i.e. more-frequent regime changes; or it can be described by indicators of social unrest and political violence, such as the number of political assassinations, the manifestation of violent revolutions and the occurrence of military coups. As mentioned above, a high propensity of executive instability is associated with uncertainty about the new economic policies of a potential new government; as a consequence, risk-averse individuals may hesitate to undertake economic activity, and subsequently decreases private investment in an economy. Similarly, foreign investors prefer a stable political environment in deciding whether or not to invest in a country, and in the presence of political unrest reduces foreign capital inflows in an economy.

[Alesina & Perotti \(1996\)](#) considers executive instability as political instability in order to explain the indirect linkage between income inequality and capital accumulation. They estimate a two-equation system on a sample of 70 countries for the period 1960-85, considering investment in physical capital and political instability as endogenous variables. The results point out a statistically significant effect from inequality to instability and from instability to investment. Explicitly, income inequality leads to an increase in political instability and political instability, in turn, reduces investment. This confirms that political instability is negatively correlated with growth in cross-country data. [Alesina et al. \(1996\)](#) considers the propensity of government collapses as a measure of political instability. The authors study the joint determination of propensity to government changes and economic growth in a sample of 113 countries, for the period 1950-1982. From a theoretical view point the results confirm that countries in which there is a high degree of government change, the corresponding growth for the same time period is considerably lower than otherwise. However, the converse does not hold. The authors find that contemporaneous low economic growth does not increase the contemporaneous propensity of government changes. Moreover, in

<sup>6</sup>See e.g. Chamley (1986), Lucas (1990), Jones, Manuelli and Rossi (1993).

<sup>7</sup>Persson and Tabellini, 2000.

<sup>8</sup>Baker, Bloom and Davis, 2011.

## Journal of Economics and Political Economy

presence of frequent government collapses, additional collapses are likely to occur, meaning that political instability tends to be persistent. Finally, the findings suggest no differences in growth performance between democracies and non-democracies.

The theme of political regimes and economic growth has been often in the centre of debates. [Acemoglu et al. \(2002\)](#) has studied the period between 1500 and 1850, to elucidate the phenomenal economic growth in Western Europe, which the authors term as “*First Great Divergence*”, the authors have explained the capitalist growth of this period, by means of Atlantic Trade i.e. the trade between Europe and America, Africa and Asia. Further as the profits increased from Atlantic trade and with the emergence of colonialism, the merchant groups became more powerful, and induced changes in political institutions. This in turn reduced expropriation by the monarchists and led to an increase in commerce and production for the market, and thereby paving way for the emergence of new institutional forms and technologies. The authors further provide evidence that it was the subtle marriage between the growth opportunities offered by the Atlantic, and the emergence of economic institutions that provided secure property rights, across the society, which consequentially allowed the free entry of entrepreneurs into profitable businesses. These economic institutions resulted in the development of political institutions, which constraint the power of the monarchists. The authors term these groups of economic and political institutions as “*capitalist institutions*”, the authors concur it was essentially the rise of these capitalist institutions, owing to the rise in Atlantic trade that strengthened new commercial interests, and enabled them to demand institutional changes necessary for capitalist growth. This viewpoint is further supported by [Jha \(2010\)](#) who studied the case of long parliament in England from 1640-1660, wherein the king of England enjoyed supremacy over the long parliament, and dismissed parliament at will. The king of England also had ‘*sovereignty*’, rights over foreign policy, including rights to declare war, to collect customs and to charter monopolies on most goods and innovations introduced from abroad. However the summoning of parliament in 1640 initiated a process of institutional change, whereby the long parliament acquired the rights to convene without royal approval, to control state finance, and to direct foreign policy and war. In order to understand the formation of a successful coalition in favour of representative government that was formed in the seventeenth century England, the author has considered for the given study the social and economic endowments of 548 members of the long parliament. The results astonishingly show little sensitivity to the support or opposition on the parliamentary takeover of executive authority while considering a range of domestic wealth endowments. However the areas that strongly supported the parliamentary control of government were the ones that were strongly governed by the executive under the existing constitution, and thus were most likely to change with a change in regime. Further the author finds an alignment effect, with respect to the financial innovation, by means of introduction of shares. Though it had little effect on the existing mercantile endowments, it had a strong influence on the non-merchants to support constitutional reforms. In fact shares appear to have played a decisive role for non-merchants to support reforms, and changing support for parliamentary control of government from a minority position to the one enjoying majority support. Henceforth the central synthesis of this paper has been to demonstrate the political multiplier effect, which can be attributed to the broad support for institutional reforms, which was forged by combining new opportunities for future wealth, with a financial mechanism to share that wealth. This allowed individuals to trade endowments, and henceforth made politics less conflictual. Thereby financial innovation appears to have been central in aligning disparate interests that led to one of the first, and among the most enduring,

## Journal of Economics and Political Economy

traditions of representative government in the world. Further [Ehrlich & Lui \(1999\)](#), for instance, explored the association between long-term economic growth, political regimes and corruption. The authors presented a theoretical model in which corruption and growth were endogenous, and the effects of the former on the latter depend upon the political regime that oversees the economy. The authors consider two types of political regimes: democracy, a competitive structure where bureaucrats compete over central power; and autocracy, a monopolist structure in which an influential and rational leadership is capable of imposing its will on others. In their model, a relationship between corruption and growth is found in democratic regimes only.

[Przeworski & Limongi \(1993\)](#) instead considered indirect impacts of regimes on growth via investment and the size of the public sector, ignoring impacts via income inequality, technological change, human capital, or population growth. The authors considered both “*against*” and “*in favour*” of democracy arguments concluding that regimes do not capture the relevant difference in growth rates across nations. However [Mansfield et al. \(2000\)](#) have discussed the impact of regimes on trade policy in an empirical setting; they discuss the rapid lowering of trade barriers in democratic institutions, wherein the threat of veto power by either of the legislatures led executives to search for lower mutually acceptable level of trade barriers. The authors have asserted that the formulation of trade policy whether in democratic or autocratic institutions rests solely on institutional settings rather than on the policy preferences of the decision makers. The authors conclude that trade barriers will be lower between democracies, than between a democracy and an autocracy. The authors have provided empirical evidence that trade wars between two protectionist legislatures will be higher, than in the presence of one legislature. Henceforth two democratic legislatures will choose significant trade liberalization policies. In addition to this the authors have also considered whether the level of aggregate trade barriers will be higher within autocratic or democratic pairs, or mixed pairs depends on the relative trade preferences of the actors involved, though there is a lack of empirical evidence to support this claim. In the end the authors conclude that because of the presence of protectionist threat provided by the legislature in democracies, the result can be more open trade, rather than less. This is further supported by the empirical results of [Jensen \(2003\)](#) (see also [Milner 1999](#); [Simmons & Elkins 2004](#)) wherein the author has considered the political preconditions necessary in attracting foreign direct investment (FDI)<sup>9</sup> for a sample of 114 countries, the author has used cross-section and panel data research techniques to analyse the impact of economic conditions, policy decisions and democratic institutions of the 1980s on the level of FDI inflows in the 1990s. The empirical results confirm that democratic political institutions attract greater FDI inflows, even when controlling for the various political and economic factors. Democratic governments attract 70 percent more FDI as a percentage of GDP than their authoritarian counterparts. The authors succinctly present the case that even though authoritarian regimes are preferred over democratic regimes by multinational firms while making foreign investments, as they provide favourable entry conditions owing to lack of constraints, and the possibility of providing low-cost workforce. However firms still prefer democratic regimes, as they are exposed to political risks namely nationalization and expropriation, since foreign investments are mobile ex ante, but relatively illiquid ex post. It is the credibility offered by democratic institutions, because of the number of veto players and audience costs, which considers that democratic leaders

<sup>9</sup>Foreign Direct Investment (FDI) is defined as private capital flows from a parent firm to a location outside of a parent firm’s home nation.

are held accountable for their actions, including renegeing on promises and threat. Since if government renege on the promises made to multinational firms ex post investment, then democratic leaders may suffer electoral costs. It is because of these checks and balances which are offered by democratic institutions that allow multinational firms to mitigate political risks arising ex post, and make investments in democratic countries, even though ex ante benefits of authoritarian states, outweigh the ones offered by democratic countries. A further extension to this line of reasoning from an ideological perspective is presented by [Quinn & Toyoda \(2007\)](#) wherein they have presented an empirical analysis, concerning the openness and closedness of an economy based on anti- and prointernational capitalist ideology, and its influence on global financial liberalization. [Mansfield & Mutz \(2009\)](#) have further extended this discussion from a psychological perspective by analysing the US economy in the context of material self interest and people's perception on how free trade affects the US economy as a whole. The authors by means of national surveys have concurred that, even though standard political economy models infer that trade preferences are based on the self interests of the individuals. These studies have ignored the impact of information that drives the perception of trade's collective level impact on the nation.

### 3.3 Property Rights

A crucial assumption underlying a market economy is the protection of individual property rights, with heavy reliance on legally enforceable contracts, arising from English common law, thereby inducing transparency as a guarantee of protection against deceit and fraud. There cannot be any better elucidation of this than the widely cited judgement of Adam Smith "*Little else is requisite to carry a state to the highest degrees of opulence from the lowest barbarism, but peace, easy taxes, and tolerable administration of justice*". [Rajan & Zingales \(1998; 2001\)](#) presents an interesting case considering the relationship based, and the market based, Anglo-Saxon oriented financial system, wherein they discuss the case of Asian crisis of 1998, and the Japanese '*keiretsu*' oriented relationship system. The authors strongly advocate that the efficiency of the market based financial system rests solely on its transparency, and proper transmission of information. In comparison to the otherwise relationship oriented system, which quite often as has been the case subjected to government intervention, and showcases the malaise that was created in the aftermath of the Asian crisis. [Easton & Walker \(1997\)](#) provided empirical evidence on the importance of property rights, and pricing policy. The authors conclude economic freedom is highly desirable, and that 'market socialism', will not only create slack within an economy, but would also reduce citizen's welfare in a country. To support this claim they have compared the case of Hong Kong and communist era countries namely Czechoslovakia, Hungary, Poland and Romania from 1985 for their respective national incomes, and use economic freedom, as a proxy to estimate the differences in per capita income across countries. The authors concur that in the presence of same degree of economic freedom in these countries, as that of Hong Kong per capita income in these countries would have been on average \$6,350 higher.

A part of the literature points to the institutional environment that protects individual private property rights as an important component for economic growth. [Knack and Keefer \(1995\)](#) identify direct measures of this institutional environment, and conclude that there are substantial returns to future research, when taking into account the variables that reflect enforcement of property rights, and also the efficiency with which states determine economic policies and allocate public goods. The authors highlight innumerable limitations in both instability proxies such as revolutions, coups and political assassinations, and the Gastil indices, used by researchers to capture the relevant threats to property rights. Political violence,



for example, is very sensitive to economic performance, which can induce problems of simultaneity into estimates of the effects of political violence on growth and investment. Gastil indices, in turn, are aggregate measures constructed without the specific aim of measuring the security of property rights. These indices include many dimensions that are not closely related to property rights, like freedom of religion or rights of worker association. Nevertheless, the aggregate feature of Gastil indices leads to the possibility of measurement error in evaluating particular institutions thought to affect property rights.

### 3.4 Myopic Governments

Government myopia is one of the key concepts within political instability, and incidentally is also related with economic growth. An unstable government induces incumbent policy-makers to follow myopic policies driven by vested self interests of getting reelected, by appeasing a relatively smaller subset of population namely interest groups<sup>10</sup>. Many Governments care mostly about the short run, because of elections or other forms of political mortality limit horizons. Myopic policies can take more than one form – for instance, too little investment or too much public debt. As stated by Acharya and Rajan (2011, p. 2) “short horizon governments do not care about a growing accumulation of debt that has to be serviced – they can pass it on to the successor government...”. Associating this view with the idea that debt is the result of myopic fiscal policy where the government is assumed to have a smaller discount factor than the private sector<sup>11</sup>, it becomes clear that debt reduces economic growth, and therefore, welfare.

## 4. Technological progress and Growth: The incentives to innovate

Incentives to innovate are a second channel through which economic policy affects growth. In this context, the conflict of interest shifts from rich and poor, as in the income distribution issue, or from alternative governments with different preferences for public spending, as in the political instability discussion, towards traditional producers and innovators. Traditional production sectors, meaning sectors using old technologies, usually conflict with innovators seeking to introduce new productive technologies. Depending on these opposing forces, governments implement protectionist policies that hamper economic growth, and reduce social welfare.

As discussed previously the Schumpeterian branch of endogenous growth theory has addressed the innovation issue by focusing on the monopoly rents that are accrued to a successful innovator (see Aghion & Howitt, 1992). In such a Schumpeterian model, a more intense product market competition is likely to reduce incentives for innovation, and therefore growth, by decreasing the flows of rent. In other words, expectation about more research in the future discourages research at the present. In light of this argument, regulations, industrial and microeconomic policies in general, should be put in place in order to stimulate growth.

In a similar vein, Davidson & Segerstrom (1998) develop a model with two types of R&D activities: innovative R&D, an activity through which firms create new and higher-quality products; and imitative R&D, wherein firms engage in R&D to develop differentiated versions of other firms’ products. Successful innovators earn temporary monopoly profits, because successful imitations rapidly decrease the market price. According to their findings, not all forms of knowledge

<sup>10</sup> Persson and Tabellini, 2000.

<sup>11</sup> Rieth, 2011.

creation contribute to economic growth. Growth is positively related to innovation rate and is unaffected by the imitation rate. Therefore providing subsidies to R&D expenditures act as a tool to stimulate growth; and therefore has important implications for policy-makers. Essentially, it is optimal to heavily subsidize innovative R&D and heavily tax imitative R&D. Moreover, the authors specify when governments are not able to apply separate subsidy rates for innovative and imitative R&D, then a high general R&D subsidy combined with strict patent enforcement could be a second best.

In a slightly different line of argument, [Aghion et al. \(2001\)](#) derive predictions regarding the effects of product market competition and imitation on the long-run industry structure. In particular, at least a small (but positive) level of product market competition is always growth enhancing; while excessive imitation always hurts growth. However, as for product market competition, a little imitation is almost always growth-enhancing. The authors further claim that “*anti-trust policies and patent legislation affects growth not only through their direct effect on innovation incentives in each individual industry but also through their composition effect, that is, through their influence on the cross- industry distribution of technological gaps and the corresponding distribution of incremental rents, and in particular on the frequency of a zero gap*”<sup>12</sup>. [Aghion et al. \(2009\)](#) have further tried to present empirical evidence in the context of innovation and institutional ownership. They have argued that the role of institutional ownership is a precursor to innovation activity of public traded firms, in order to buttress their claim the authors have studied 800 US firms over the 1990s, and have considered patent citations as a proxy for innovation. Their study documents that there exist a small and positive relationship between institution ownership and R&D, but there is a larger positive effect on the productivity of R&D. This arises because institutions have higher incentives and are far better equipped in monitoring the managers namely the chief executive officer (CEO). Henceforth this effective monitoring encourages innovation, and addresses the problem of managerial slack, and career concerns that makes the manager naturally averse to innovation, because a failure may result in his ouster from the firm. Based on the results the study shows that institutions are important for innovation when product market competition is higher, and that risk consideration at the managerial level plays an important role in preventing innovation. Finally the authors suggest that with a high level of institutional investment, the probability of a CEO ouster is low, given a decline in profitability.

The model presented in [Persson & Tabellini \(2000\)](#) supports the idea that political power of vested interests, i.e. the lawful right of an individual or entity to gain access to tangible or intangible property, associated with traditional sectors or traditional technologies can hamper investment and economic growth. The fundamental role played by vested interests is further analysed by [Krusell & Rios-Rull \(1996\)](#). The authors focus on the socio-political process determining growth-oriented economic policies, and construct a model in which vested interests are responsible for the prohibition of technological innovation: residuals claimants of a currently operational technology seek to prevent the emergence of new technologies. The final equilibrium of the model is characterized by cycles with long periods of stagnation and short periods of innovation and growth. The explanation of these cycles relies on returns to innovation and the counteracting vested interests among those who control the old technologies.

<sup>12</sup> [Aghion et al. 2001](#), pp. 2-3.

## 5. Conclusion

There is a very large literature on the link between economic growth and political economy theory. Many different schools of thought have studied and analysed economic policy and the political determinants of growth. It is beyond the scope of this essay to survey all of this literature. Nevertheless, a considerable number of papers focusing on the relationship between inequality and growth, distributive politics, taxation on capital, political instability, economic policy uncertainty, R&D subsidies, and so on, has been discussed in order to provide a holistic understanding of the origins of political economy, and its effect on economic growth in general.

According to the theoretical literature, fiscal policy based on distributional considerations negatively affects growth due to tax distortions that reduce the incentives for capital accumulation. Although this line of reasoning is quite convincing from an intuitive perspective, however it receives little support from empirical studies. Inequality, especially within the context of a majoritarian election system, is detrimental for growth, and there exists a negative correlation between inequality and growth. On the other hand there exist little empirical evidence to prove that redistributive transfer directly hurts growth. Moreover, there is no strong evidence to account for differences in the relationship between inequality and growth in democracies and non-democracies. One of the plausible explanations for this can be the difficulty in distinguishing income effect from democracy effect for variations in GDP.

Empirical evidence concerning the link between political instability and growth is also mixed. The correlation between the two appears to be negative, but empirical research has not been closely tied to theoretical work, even though the scholarly work that has been discussed in this essay supports the theoretical view, that high propensity of government collapses, or high level of social unrest and political violence hurt growth. What makes it difficult to find concordant empirical results is again the presence of strong empirical correlations between inequality, executive instability, poor enforcement of property rights, and other central variables.

Many authors have emphasized on the role of innovation and research activity to explain economic growth of a country. Economic policies are likely to affect the incentive to innovate for example influencing the allocation of resources among different industries. In this context, lobbying from interest groups has a strong influence on national governments, while making decisions pertaining to industrial and microeconomic policies. Often, incentives to innovate depend on the special-interest politics of various sectors in the economy. Agents operating in traditional sectors try to prevent innovation in order to preserve their rent, however, innovation entails externalities that open the door for growth-promoting policies.

## References

- Acemoglu, D., Johnson, S., Robinson, J. 2002. The rise of Europe: Atlantic trade, institutional change and economic growth. [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=355880](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=355880)
- Acharya, V. & Rajan, R. 2011. Sovereign debt, government myopia, and the financial sector. NBER Working Paper No. 17542.
- Aghion, P. & Howitt, P. 1992. A Model of Growth Through Creative Destruction. *Econometrica*, Vol. 60, No. 2, March, pp. 323-351.
- Aghion, P., Harris, C., Howitt, P., Vickers, J. 2001. Competition, Imitation and Growth with Step-by-Step Innovation. *The Review of Economic Studies*, Vol. 68, No. 3, July, pp. 467-492
- Aghion, P., Reenen, J. & Zingales, L. 2009. Innovation and Institutional Ownership. NBER

## Journal of Economics and Political Economy

- working paper No. 14769. <http://www.nber.org/papers/w14769>
- Alesina, A. & Rodrik, D. 1994. Distributive politics and economic growth. *Quarterly Journal of Economics*, May, 109 2), pp. 465–90.
- Alesina, A. & Perotti, R. 1996. Income distribution, political instability, and investment. *European Economic Review*, 40(6), pp. 1203-1228.
- Alesina, A., Ozler, S., Roubini, N., Swagel, P. 1996. Political Instability and Economic Growth. *Journal of Economic Growth*, 1 (2), pp. 189 – 211.
- Ansolabehere, S., Gerber, A., Snyder, J. 2002. Equal Votes, Equal Money: Court ordered redistricting and public expenditures in the American states. *The American Political Science Review*, Vol. 96, No. 4, pp. 767-777.
- Baker, S.R., N., Bloom & Davis, S.J. 2011. Measuring Economic Policy Uncertainty. Mimeo, Stanford University.
- Bartels, L. 2005. Economic Inequality and Political Representation. Department of Politics and Woodrow Wilson School of Public and International Affairs, Princeton University - <http://www.princeton.edu/~bartels/economic.pdf>
- Benabou, R. 1996. Inequality and Growth. NBER Working Paper 5658, National Bureau of Economic Research, Massachusetts USA.
- Bhagwati, J. World bank lecture on The Critiques of free trade: a refutation. given on June 25th 2008 - [http://www.columbia.edu/~jb38/papers/pdf/WB\\_Lecture\\_Nov\\_15\\_08\\_FINAL.pdf](http://www.columbia.edu/~jb38/papers/pdf/WB_Lecture_Nov_15_08_FINAL.pdf)
- Bhagwati, J. 2009. The critiques of capitalism after the crisis: myths and fallacies. *World Affairs Journal* - [http://www.columbia.edu/~jb38/papers/pdf/World\\_Affairs\\_Oct\\_2009.pdf](http://www.columbia.edu/~jb38/papers/pdf/World_Affairs_Oct_2009.pdf)
- Blanchard, O. 1997. *Macroeconomics*. 4th ed., Prentice Hall.
- Chamley, C. 1986. Optimal Taxation of Capital Income in General Equilibrium with Infinite Lives. *Econometrica*, Vol. 54, pp. 607 - 22.
- Davidson, C. & Segerstrom, P. 1998. R&D Subsidies and Economic Growth. *RAND Journal of Economics*, Vol. 29, No. 3, pp. 548 - 77.
- Despres, E., Hart, A., Friedman, M., Samuelson, P., Wallace, D. 1950. The problem of economic stability. *The American Economic Review*, Vol. 40, No. 4 pp. 501-503+505-538
- Easterly, W. & Rebelo, S. 1993. Fiscal policy and economic growth: An empirical investigation. *Journal of Monetary Economics*, 32, pp. 417 - 458.
- Elrich, I. & Lui, F. 1999. Bureaucratic corruption and endogenous economic growth. *Journal of Political Economy*, Vol. 107, No. 6, pt. 2, pp. s270 - s293.
- Easton, S. & Walker, M. 1997. Income, Growth, and Economic Freedom. *The American Economic Review*, Vol. 87, No. 2, pp. 328-332.
- Friedman, M. & Friedman, R. 1962. *Capitalism and Freedom*. University of Chicago Press, Chicago.
- Garrett, G. 2000. The causes of globalization. *Journal of Comparative Political Studies*, Vol. 33 No. 6/7 pp. 941-991.
- Greenspan, A. 2010. *The crisis*. Brookings Institution
- Grossman, G. & Helpman, E. 1994. Protection for sale. *The American Economic Review*, Vol. 84, No. 4, pp. 833-850.
- Hayek, F. 1944. *The Road to Serfdom*. University of Chicago Press 1994.
- Hicks, J. 1939. *Value and Capital: An Inquiry into Some Fundamental Principles of Economic Theory*. (2nd ed. 1946) Oxford: Clarendon Press.
- Jensen, N. 2003. Democratic Governance and Multinational Corporations: Political Regimes and inflows of Foreign Direct Investment. *Journal of International Organization*, Vol. 57, No. 3, pp. 587-616.
- Jha, S. 2010. *Financial Innovations and Political Development: Evidence from Revolutionary England*. Stanford University Graduate School of Business Research Paper No. 2005. Available at SSRN: <http://ssrn.com/abstract=934943>
- Jones, E. 1981. *The European Miracle: Environments, Economies, and Geopolitics in the History of Europe and Asia*. Cambridge University Press, New York.
- Jones, L., Manuelli, R. & Rossi, P. 1993. Optimal Taxation in Convex Models of

## Journal of Economics and Political Economy

- Equilibrium Growth. *Journal of Political Economy*, 101, pp. 485 - 517.
- Jones, C. 1995. Time series tests of endogenous growth models. *The Quarterly Journal of Economics*, Vol. 110, No. 2, pp. 495-525.
- Keynes, J. 1936. *The General theory of employment, interest and money*. Macmillan, London.
- King, R. & Levine, R. 1993. Finance and Growth: Schumpeter might be right. *The Quarterly Journal of Economics*, Vol. 108, No. 3, pp. 717-737.
- Knack, S., & Keefer, P. 1995. Institutions and economic performance: Cross-country tests using alternative institutional measures. *Journal of Economic and Politics*, Vol. 7, pp. 207 – 27.
- Lucas, R. 1988. On the Mechanics of Economic Development. *Journal of Monetary Economics*, Vol. 22, pp. 3 - 42.
- Lucas, R. 1990. Supply Side Economics: An analytical Review. *Oxford Economic Papers*, Vol. 42, pp. 293 - 316.
- Mankiw, G., Romer, D., Weil, D. 1992. A contribution to the empirics of economic growth. *The Quarterly Journal of Economics*, Vol. 107, No. 2, pp. 407-437.
- Mansfield, E., Milner, H., Rosendorff, P. 2000. Free to trade: Democracies, Autocracies, and International Trade. *The American Political Science Review*, Vol. 94, No. 2, pp. 305-321.
- Mansfield, E. & Mutz, D. 2009. Support for Free Trade: Self Interest, Sociotropic Politics, and Out-group Anxiety. *Journal of International Organization*, Vol. 63, pp. 425-457.
- Marshall, A. 1890. *Principles of Economics*. London: Macmillan; reprinted by Prometheus Books.
- Marx, K. 1867. *Capital: A Critique of Political Economy*, Vol. I. The Process of Capitalist Production. Charles H. Kerr and Co. 1906. Library of Economics and Liberty
- Mill, J. 1859. On Liberty. London: Longman, Roberts & Green, 1869, pp. 21-22.
- Milner, H. 1999. The political economy of international trade. *Annual Review of Political Science*, Vol. 2, pp. 91-114.
- Mises, L. E. 1920 Economic calculation in the socialist commonwealth, reprinted in Hayek (1935).
- Mises, L. E. 1922. *Socialism: An Economic and Sociological Analysis*. trans. J. Kahane, Foreword by F.A. Hayek (Indianapolis: Liberty Fund, 1981).
- Neely, C. 1999. An introduction to capital controls. Review Federal Reserve Bank of St. Louis URL: <http://research.stlouisfed.org/publications/review/99/11/9911cn.pdf>
- Perotti, R. 1996. Growth, income distribution, and democracy: What the data say. *Journal of Economic Growth*, Vol. 1, No. 2, pp. 149 - 187.
- Persson, T. & Tabellini, G. 2000. *Political Economics Explaining Economic Policy*. MIT Press.
- Persson, T. & Tabellini, G. 1994. Is inequality Harmful for Growth? *American Economic Review*, Vol. 84, No. 3, pp. 600-621.
- Przeworski, A. & Limongi, F. 1993. Political regimes and economic growth. *The Journal of Economic Perspectives*, Vol. 7, No. 3, pp. 51-69.
- Quinn, D. & Toyoda, M., 2007. Ideology, and Voter Preferences as determinants of financial globalization. *American Journal of Political Science*, Vol. 51, No. 2, pp. 344-363.
- Rajan, R. & Zingales, L. 1998. Which Capitalism? Lessons from the East Asian Crisis. *Journal of Applied Corporate Finance*, Vol. 11, No. 3, pp. 40-48.
- Rajan, R. & Zingales, L. 2000. The tyranny of Inequality. *Journal of Public Economics*, Vol. 76, pp. 521-558.
- Rajan, R. & Zingales, L. 2001. Financial systems, industrial structure, and growth. *Oxford Review of Economic Policy*, Vol. 17, No. 4, pp. 467-482.
- Rajan, R. & Zingales, L. 2003. The great reversals: the politics of financial development in the twentieth century. *Journal of Financial Economics*, Vol. 69, pp. 5-50.
- Read, L. 1958. I, Pencil. Foundation for Economic Education, pp. 1-13.
- Riccardo, D. 1817. *Principles of Political Economy and Taxation*. Cambridge University



## Journal of Economics and Political Economy

- Press, Sraffa Ed.
- Rieth, M. 2011. Myopic Governments and Welfare-Enhancing Debt Limits. Working Paper Series No. 1308, European Central Bank.
- Romer, D. 1996. *Advanced Macroeconomics*. 4th ed., McGraw-Hill.
- Romer, P. 1986. Increasing Returns and Long-Run Growth. *Journal of Political Economy*, Vol. 94, pp. 1002-1037.
- Sachs, J. & Warner, A. 1995. Economic convergence and economic policies. National Bureau of Economic Research (NBER) No. 5039.
- Schumpeter, J. 1950. *Capitalism, socialism, and democracy*, New York, Harper
- Simmons, B. & Elkins, Z. 2004. The globalization of liberalization: Policy diffusion in the international political economy. *American Political Science Review*, Vol. 98, No. 1, pp. 171-189.
- Smith, A. 1776. *An inquiry into the nature and causes of the wealth of nations*. Edwin Cannan, ed. 1904. *Library of Economics and Liberty*. <http://www.econlib.org/library/Smith/smWN.html>
- Solow, R. 1956. A Contribution to the Theory of Economic Growth. *The Quarterly Journal of Economics*, Vol. 70, pp. 65-94.
- Swan, T. 1956. Economic Growth and Capital Accumulation. *Economic Record*, Vol. 32, pp. 334-61.



### Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by-nc/4.0>).

