

Federalism's Impact on Foreign Direct Investment Inflows

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Abstract

Many developing countries are actively seeking Foreign Direct Investment (FDI) because it they enjoy the transfer of skills, knowledge, and capital. Multinational corporations (MNCs) are more likely to invest in countries with lower political risk. Knowing this, what forms of governance will help a country attract FDI by lowering its political risk? Will being a democracy help; will being federal help? This study attempts to add to inconclusive existing literature on this topic. It utilizes the governance classifications of 71 countries made by Dr. Robert Inman's in his paper "Federalism's Values and the Value of Federalism". Countries are classified as one of the following: constitutionally based federal democracy, an administratively based federal democracy, a unitary democracy, a federal dictatorship, or a unitary dictatorship. Then it studies the impact of the governance structures on the total investment in a country, the FDI inflows as a percentage of GDP, the net FDI inflows as a percentage of GDP, and the FDI inflows per capita in \$US. The conclusions are as follows: 1) Democracy is the most importance governance factor in attracting greater FDI. 2) Federalism does not improve upon democracy in attracting more FDI. 3) Federalism does not help nondemocratic countries attract FDI. 4) Federalism is still important because it impacts economic rights, which in turn help attract greater FDI.

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Introduction

Academics in a variety of disciplines proclaim numerous benefits to adopting a federal form of governance. Two sets of literature examine the importance of federalism; one group provides a theoretical framework for understanding the potential positive impacts of federalism and the other attempts to empirically study the relationships between federalism and proposed beneficial outcomes. “Federalism’s Values and the Value of Federalism” by Dr. Robert P. Inman, the advisor to this project, served as a starting point for understanding the empirical relationships between federalism and a number of beneficial outcomes that theory claims should exist. In particular, that study examined whether or not “federalism [serves] as a means to more efficient public and private economies, as the foundation for increased political participation and democratic stability and as an important check on governmental abuses of personal rights and liberties.”¹ The results of the study will be discussed later in its relationship to this project. As this broad study indicates, academics often claim that federalism improves the performance of economies. This paper takes a much narrower approach towards understanding this relationship, and attempts to understand whether or not federalism contributes to increased amounts of Foreign Direct Investment (FDI).

Why should it be useful to understand the relationship between the form of governance and FDI? One answer would be that FDI is an essential factor for economic growth. This however is not a trivial claim because “[t]he role of foreign direct investment (FDI) in the growth process has long been a topic of intense debate.”²

¹ Inman, Robert. (2007) “Federalism’s Values and the Value of Federalism”, *CESifo Economic Studies* **53**, 522-560.

² Balasubramanyam, V.N., Salisu, M. & Sapsford, D. (1996) “Foreign Direct Investment and Growth in EP and IS Countries”, *Economic Journal* **106(1)**, 92-105.

Nonetheless, there exists both theoretical and empirical research that argues the position that once a country attracts FDI, it experiences increased efficiency and growth. Despite the lack of resolution to this question, an empirical analysis of the relationship between federalism and FDI can serve useful since “many less developed countries (LDCs) have been actively seeking FDI inflows since the early 1980s, based on the belief that FDI can bring several benefits, including technology transfers, managerial skills and access to international markets.”³ Presumably, these countries will continue to seek FDI due to their assumptions about its benefits. Understanding how they can best achieve their desired results seems to be a reasonably useful exercise.

Theoretical Literature

In his paper “The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development”, Barry Weingast provides much of the theoretical arguments for the hypothesis of this project. It examines the idea that historically, federalism played a critical role in the growth of numerous countries, including “England in the 18th century and the United States in the 19th and 20th centuries ... [and also] China over the past 15 years.”⁴ The arguments he utilizes to justify his claims are worth exploring because the same theoretical arguments can help to justify the hypothesis made and to ultimately explore the meaning of the empirical results herein contained.

The first step is to understand what Weingast defines as “Market-Preserving Federalism”. This paper attempts to contribute something to the understanding of this

³ Yang, Benhua. (2007) “Autocracy, Democracy, and FDI Inflows to the Developing Countries”, *International Economic Journal* **21(3)**, 419-439.

⁴ Weingast, Barry. (1995) “The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development”, *Journal of Law, Economics, & Organization* **11(1)**, 1-31.

classification also, as an aside to the primary hypothesis; this will be discussed later. Weingast establishes five criteria that classify a governance structure as market-preserving federalism. They are the following:

(F1) A *hierarchy* of governments, that is, at least “two levels of governments rule the same land and people,” each with a *delineated scope of authority* so that each level of government is autonomous on its own, well-defined sphere of political authority.

(F2) The *autonomy* of each government is institutionalized in a manner that makes federalism's restrictions self-enforcing.

(F3) Subnational governments have primary regulatory *responsibility over the economy*.

(F4) A *common market* is ensured, preventing the lower governments from using their regulatory authority to erect trade barriers against the goods and services from other political units.

(F5) The lower governments face a *hard budget constraint*, that is, they have neither the ability to print money nor access to unlimited credit.⁵

Once these conditions are met, a number of consequences follow. Discussions on those relevant to the hypothesis of this paper follow. The first consequence described by Weingast is the “induced competition among lower units of the federal structure.”⁶ In thinking about this in context of a well known federal government, the United States, one can consider competition among states, which are lower units of the federal structure. States have autonomy in deciding numerous issues and thus can vary quite significantly

⁵ Weingast, Barry. (1995) “The Economic Role of Political Institutions: Market-Preserving Federalism and Economic Development”, *Journal of Law, Economics, & Organization* **11(1)**, 1-31.

⁶ *Ibid.*

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from each other in their legal and political environments. Due to conditions set out from market-preserving federalism, it follows that “political competition implies that jurisdictions must compete for capital, labor, and economic activity by offering menus of public policies (e.g., levels of taxation, security of private rights, social amenities, and public goods).”⁷ Those actors that seek to utilize these policies will choose the correct menu for them.

The application to FDI follows in a relatively straight forward manner. First, assume that countries actively seek FDI. Although this paper does not focus on this issue, it cites Yang (2007), who claims that they do. Then assume that if the country as a whole seeks FDI due to some presupposed benefits, local entities would seek FDI for themselves to reap the benefits locally. This makes sense if one considers that managerial skill transfer and technological knowledge transfer are some of the assumed benefits; jurisdictions that obtain these would be more capable of competing with the other lower units. One can imagine that a particular set of menu choices regarding economic policies such as tax rates, operating rules and restrictions, labor laws, etc. would be optimal in attracting a multi-national corporation (MNC) to invest in that particular lower unit of the federal structure, whether it is a state or whatever else. Since competition exists, this menu of options would be more favorable to MNCs than a menu created by one entity, such as what would occur in a dictatorship for example. Consequently, MNCs would invest more in those jurisdictions with optimal menu options and therefore in countries with federal governance structures.

Nathan Jensen, in his paper “Federal Institutions and Multinational Investors: Federalism, Government Credibility, and Foreign Direct Investment”, provides a separate

⁷ *Ibid.*

analysis that specifically tries to deduce why federalism should induce higher FDI. His discussion does not require market-preserving federalism; it analyzes the consequences of the larger set of governance of federalism which requires the (F1) and (F2) of Weingast's criteria. The theoretical argument in his work does not rely on the concept of competition between lower units of governance for FDI. Instead it relies on the assumptions that MNCs base their decision to invest in particular countries for political reasons as well as economic ones; in particular, they would logically consider the political risks inherent in the country that could potentially hurt their bottom line. Jensen's assumption is that "political institutions, specifically federal political systems, can lower political risk for investors by increasing the trustworthiness of government."⁸

The analysis of how federal governments can lower political risk relies on the notion that the different levels of government (i.e. the federal government and the lower federal units) have veto power over each other on the economic issues that can influence the decisions of MNCs to invest. Notice that the existence of such veto powers is consistent with (F2) in Weingast's definitions of federal governance. Suppose further that the goal of each political unit is to maximize its wealth. Given these assumptions, we can begin to understand the concerns that a MNC would have in investing in a particular country.

The most dramatic manner in which a foreign government can take advantage of an MNC's invest is by nationalizing the company once the investment is made. In this way, the foreign government can "expropriate [the] assets or income streams"⁹ of the

⁸ Jensen, Nathan and McGillivray, Fiona. "Federal Institutions and Multinational Investors: Federalism, Government Credibility, and Foreign Direct Investment," *International Interactions* **31**, 303-325.

⁹ Jensen, Nathan and McGillivray, Fiona. "Federal Institutions and Multinational Investors: Federalism, Government Credibility, and Foreign Direct Investment," *International Interactions* **31**, 303-325.

MNC. These types of nationalization occurred in the late 1960s and the early 1970s. Although they are no longer common, other risks that seriously affect the income of MNCs still exist. In particular, these risks include “defaulting on tax deals, restricting capital flows, defaulting on subsidies, etc.”¹⁰ One can also imagine that dramatic increases in the tax rate would take some of the income streams of the MNC. These considerations imply that political risks are real in terms of their impact on MNC incomes and thus are important factors in determining whether or not a particular foreign investment is a positive net present value (NPV) project or not. Lower political risk would make more foreign investments positive NPV projects and thus more investments will occur.

In order to understand how the actions of federal government and unitary governments differ regarding whether or not to expropriate income streams from MNCs, it is necessary to delineate what factors influence their decisions. In order to simplify the rhetoric, this paper refers to these types of expropriations (i.e. nationalization, defaulting on tax deals, etc.) as renegeing on the “contract” between the government and the MNC to protect the political policies that induced the MNC to invest in the first place. When deciding whether or not to renege, the government considers the benefits and the costs. The benefits are immediate increases in revenue for the government. Since decisions to invest are made repeatedly, the cost is the resultant reputational damage that will likely reduce the FDI inflows in the future. Situations in which the immediate benefits outweigh the long term costs as well as situations in which the long term reputational damage and decreased FDI inflows are worth more than the immediate revenue streams can both exist. Presuming rational actors make the decisions, the action with the highest NPV will

¹⁰ *Ibid.*

be chosen by the government. Although in unitary governments, these decisions can be based on such an analysis, the idea is that federal structures prevent governments from choosing to renege even if it is the more rational decision in terms of NPV. If so doing, federal structures lower the risk that governments will renege regardless of their fiscal consideration. Thus, federalism instills confidence in the MNCs related to their assumptions about their income streams and thereby encourages investment.

Jensen and McGillivray amalgamate the existing literature (which includes Weingast's work) into a cohesive theory explaining how federalism is more effective than other governance structure in preventing renegeing on contracts.¹¹ Instead of summarizing their theory and risking losing key elements, the following is a direct quote of an example from their paper that explains the most relevant ideas.

Consider a foreign investor contemplating investing capital in a factory overseas. Suppose the foreign investor negotiates a contract to build a factory with a foreign government... [B]y defecting today, the government foregoes future benefits from FDI. However, the government wants to stay in power today. It values the short-term political benefits of defecting over higher long-term levels of FDI. In this kind of scenario, we expect the government to engage in creeping expropriation up to the point where the foreign firm is indifferent between remaining in the host country and relocating its factory elsewhere.

Suppose next that the host country is a federal political system with three states, A, B, C. Any two of these three state governments can veto the federal government's policy proposals. The federal government can veto the policy initiatives of any individual state government. Legislation relating to FDI requires the agreement of both the state and federal governments. Both the state and the federal governments benefit from FDI (via federal and local taxes, local employment, etc.).

Suppose that the state government reneges on the contract with the foreign investor by demanding higher local taxes. The state reaps the benefits from defaulting. For the government, these short-term benefits outweigh the damage to their reputation and the loss of future FDI. However, renegeing damages the reputation of both the federal and the state government. The federal government gets none of the short-term political benefits but shares the reputational costs (less

¹¹ Jensen, Nathan and McGillivray, Fiona. "Federal Institutions and Multinational Investors: Federalism, Government Credibility, and Foreign Direct Investment," *International Interactions* **31**, 303-325.

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future investment for the nation). It has an incentive to intervene to prevent the state government from defaulting. One could argue that since it is the state that defaults and not the federal government, this will not damage the federal government's reputation. However, by not stepping in to prevent the state from defaulting, the federal government's reputation is harmed.

Suppose next that the federal government reneges by demanding higher federal taxes from the foreign investor's factory, located in state A. If the federal government reneges on the contract, it reaps all of the benefits. In this case, the short-term benefits of renegeing outweigh the long-term cost in lost future investment. State A does not share in the short-term benefits; rather its reputation is damaged because it could not prevent the federal government from defaulting. Indeed, the reputational costs are shared by all the states. If the federal government steals in one state, it harms future investment in other states. States have incentives to cooperate in preventing the federal government from renegeing on FDI contracts. In this way, state governments act as a restraint on the federal government.

How do these arguments for federal systems compare with the case for unitary systems? Suppose that a particular country is unitary in structure. FDI contracts need only the approval of the central government. The central government reaps all of the benefits from FDI (some of which it distributes to local governments). The only constraint on the central government is the damage renegeing does to its own reputation. However, as discussed earlier, the immediate political benefits from renegeing often outweigh long-term economic costs. The pure reputational argument is not as powerful a constraint on the central government as is the state veto in federal systems, where because of joint reputation accountability, the federal government is prevented from renegeing by a majority of states.

...

In summary ... we should expect federal systems to attract more FDI than unitary systems.¹²

Given these strong theoretical arguments, the expectation is that empirically, federal governments attract higher levels of FDI as a percentage of GDP. However, there are other arguments within the literature that do not agree with the logic described above. Thus, there is ambiguity in the theory that needs to be resolved empirically.

In their paper, "Does Federalism Preserve Markets?," Jonathan Rodden and Susan Rose-Ackerman argue against Weingast's theory that market-preserving federalism has the positive outcomes as described above. Instead, they theorize that the effect can be the

¹² Jensen, Nathan and McGillivray, Fiona. "Federal Institutions and Multinational Investors: Federalism, Government Credibility, and Foreign Direct Investment," *International Interactions* 31, 303-325.

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exact opposite of what Weingast (and Jensen essentially) propose as the consequences of federalism. In reference to the notion that competition between lower level political units encourages the creation of the optimal menu of policy choices, they retort that “intergovernmental competition may not force subnational politicians to make efficient policies, and in fact the decentralization of authority that is necessary to bring about competition may introduce significant costs.”¹³

Their conclusions can be applied to the relationship between federalism and FDI specifically very naturally. The assumption was that if a particular country, and lower political units within that country, was seeking FDI inflows, the competition described would result in the optimal political atmosphere to attract that FDI. If however, the switch from no policy decentralization to significant policy decentralization (enough to make the competition viable and effective) has immense costs associated with it, the analysis of the government when deciding to renege may be very different. Suppose that a country is a dictatorship and its sole goal is to attract FDI. It knows that changing its governance structure by introducing policy decentralization will result in increased FDI (assume this is the result that this study finds). However, the government undergoes tremendous costs in creating the system that will be necessary. The government will only go through with the transition if the present value of the increase in FDI is greater than the present value of the costs that will be incurred. Even if the FDI inflow increase is enormous, it may not be rational to change governance structures in certain cases. Thus, the theory does not provide us with an answer here; the costs may vary significantly from country to country.

¹³ Rodden, Jonathan and Rose-Ackerman, Susan. (1997) “Does Federalism Preserve Markets”, *Virginia Law Review* **83**, 1521-1572.

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The author contributes one additional theoretical problem with applying Weingast to this particular study. Although competition may induce the “optimal menu of policies”, this optimal menu requires compromises on certain goals to achieve other more important goals. Although countries actively seek FDI, that may not be the highest priority of the countries nor of the lower political units. The optimal menu may sacrifice the structures and policies to attract the highest amounts of FDI. Thus, even if Weingast is correct in his analysis and conclusions, it does not imply that federalist countries necessary have higher amount so FDI; it certainly does imply that they have the highest capacity to do so however since if it was the top priority the analysis given previously applies. We assume in this paper that since FDI has such tremendous exogenous benefits such as technology transfer and the transfer of managerial knowledge that for most countries it would be a reasonably high enough priority to warrant attention and therefore, Weingast's ideas should be reflected in the data.

Empirical Literature

The question studied by this project has been explored before; the results have been varied and no decisive conclusion has been reached. In fact, the results are varied not only regarding federalism's impact on FDI, but on democracy's impact on FDI as well. This study attempts to answer both questions.

Benhua Yang, in his paper “Autocracy, Democracy, and FDI Inflows to the Developing Countries”, describes the existing literature on these topics in the following way: From 1983-1992 autocracies seemed to attract the highest levels of FDI and from

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1993-2002 democracies seem to do so.¹⁴ He also finds, as does the author of this paper, that the existing theoretical and empirical literature is insufficient to answer the question one way or the other. Regarding the relationship between democracy and FDI, he writes that “some authors (e.g. Li & Resnick, 2003, Jensen, 2003) argue that democracy promotes FDI inflows by providing better property rights protection, others (O’Donnell, 1978; Haggard, 1990; Greider, 1998) argue that FDI favors autocracy for reasons such as its capacity to suppress labor demands, repress against protestors, and offer tax incentives to the advantage of multinational corporations (MNCs).”¹⁵ Moreover, he writes that “the provision of effective property rights protection and contract enforcement by a democracy will promote FDI inflows (Li & Resnick 2003, Jensen, 2003). Similarly, Henisz (2000) argues that the higher number of veto players in the democratic system places constraints on policy changes and hence helps attract FDI.”¹⁶

This analysis extends naturally to the argument that federalism promotes FDI inflows. The theoretical literature supporting why this should be the case relies heavily on the concepts that argue democracy should promote FDI. In effect, democracy serves a similar purpose as federalism – as a thought experiment we assume they are mutually exclusive. Democracy lowers political risk by increasing rights protections and federalism does the same thing. Thus both should attract higher levels of FDI. However, as Yang shows, the existing empirical literature does not show this result to be the clear answer. Yang adds to the discussion by concluding that there is no “systematic

¹⁴ Yang, Benhua. (2007) “Autocracy, Democracy, and FDI Inflows to the Developing Countries”, *International Economic Journal* **21(3)**, 419-439.

¹⁵ *Ibid.*

¹⁶ *Ibid.*

relationship between democracy and FDI inflows. This result suggests that being a democracy does not help attract higher levels of FDI.”¹⁷

Jensen and McGillivray come to exactly the opposite conclusion as Yang. In particular, they find that “both democratic and federal countries attract higher levels of FDI. Both institutions help lower political risk. The additive effect of combining federalism and democracy, however, is small. As we suspected, democratic countries are already regarded as trustworthy, so the additional credibility provided by federalism has little effect on FDI. However, federalism has a strong effect on the integrity of nondemocratic countries. All else equal, federal nondemocratic countries attract some of the highest levels of FDI.”¹⁸

As has been shown through reviewing the existing literature, both the theoretical and empirical work that has been done has shown opposing results. Thus, looking at the literature in existence, we cannot come to a conclusion about the effects of democracy or federalism. Thus, this paper seeks to contribute another study to this body of literature and hopefully add additional support to one of the conclusions that has already been reached. It makes improvements on some of the methodology; most notably this occurs in the classifications of the countries that is taken from Dr. Inman's work.

Definitions

Foreign Direct Investment

The first important term that requires definition is Foreign Direct Investment, or FDI. It is important to know that FDI is not the same as portfolio investment, such as that

¹⁷ *Ibid.*

¹⁸ Jensen, Nathan and McGillivray, Fiona. “Federal Institutions and Multinational Investors: Federalism, Government Credibility, and Foreign Direct Investment,” *International Interactions* **31**, 303-325.

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make in stocks or bonds abroad. It specifically refers to investment in real operations (e.g. capital expenditures on fixed assets).¹⁹ An even more precise definition defines FDI to “an investment made to acquire lasting interest in enterprises operating outside of the economy of the investor.”²⁰ Moreover, “[t]he most important characteristic of FDI, which distinguishes it from foreign portfolio investment, is that it is undertaken with the intention of exercising control over an enterprise.”²¹ The importance then of studying FDI, versus studying portfolio investment for instance, is that when a multi-national corporation exercises control over a foreign enterprise it directly transfers managerial and other business skills to the local employees of that operation. This transfer of information can have a significant multiplier effect since the employees can apply these skills in other situations. Thus, these transfers of knowledge and skills eventually can lead to growth for the country. This combination of capital, tangible knowledge and skills, and direct creation of jobs is what makes FDI particularly special, and much more coveted than simple portfolio investment.

As can be deduced by the effects that FDI can have, it is most important for developing nations as they are the ones that desire the transfers of skills. Thus, given our theoretical discussions, we must keep in mind that there may be differences on how actively certain countries seek FDI. If we rely on the explanation that local political units seek FDI by creating the correct menu of policies, then the notion that countries seek FDI with different degrees of tenacity (which is based on the development of the country) throws a kink into that logic. Nonetheless, we have discussed Jensen's joint argument which relies both on this notion of competition and reputational arguments. Thus, there

¹⁹ Source: World Bank.

²⁰ Source: World Bank, www.UNCTAD.org

²¹ *Ibid.*

exist various theoretical explanations that can fit our model of the world even if we change the assumptions (e.g. from everyone seeking FDI actively to different degrees of tenacity in seeking FDI).

Forms of Governance

The precise definition of market-preserving federalism based on Weingast's work is provided in the "Theoretical Literature" section. However, the classifications in this paper are slightly different (Weingast was simply used to provide theoretical context that is still relevant as many countries we classify as federal fit his definition of market-preserving federal governments). The classifications of the forms of governance are based on those classifications used by Dr. Inman in his paper "Federalism's Values and the Value of Federalism". He relies on William Riker's definition of federalism which is "(A) political organization in which the activities of government are divided between regional governments and a central government in such a way that each kind of government has some activities on which it makes final decisions."²² Essentially, this requires (F1) and (F2) in Weingast's definitions and (F3), (F4), and (F5) may or may not hold true.

One of the improvements that this paper makes on much of the existing literature is that it utilizes categorical measures for the form of governance (adapted from Dr. Inman's work) instead of using a scale of democracy or federalism. Much of the existing literature tries to rank countries how democratic and how federal they are. This study does not that; it simply classifies countries into particular categories of governance. In so

²² Inman, Robert. (2007) "Federalism's Values and the Value of Federalism", *CESifo Economic Studies* **53**, 522-560.

doing, it seeks to answer whether or not instituting the basic structures of particular types of governance types makes a difference in attracting FDI inflows. The following is taken from Dr. Inman, the advisor to this project:

[The following table, Table 1] classifies each of the 73 countries included in this study as either a federal democracy (denoted $FED/DEM = 1$ in the empirical analysis), a unitary democracy without significant policy decentralization called an administratively federal democracy [$ADMFED/DEM = 1$] a unitary democracy without policy decentralization called simply a unitary democracy ($UNT/DEM = 1$), a federal dictatorship ($FED/DICT = 1$), or a unitary dictatorship ($UNT/DICT = 1$).²³

See Table on the next page.

The difference between being $FEDDEM$ and $ADMFEDDEM$ is that $FEDDEM$ refers to constitutionally federal governments where are $ADMFEDDEM$ refers to de facto federal governments that are determined based on the amount of local government revenue as a percentage of total government revenue (See Inman (2007) for more details). A federal dictatorship essentially has some policy decentralization where as a unitary dictatorship does not.

²³ *Ibid.*

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Table 1

Form of Governance	Number of Provinces (N) N=1 if Unitary	Form of Governance	Number of Provinces (N) N=1 if Unitary
Federal/Democracy (FED/DEM = 1)	Mean = 20.3	Administrative Federal/Democracy (AFED/DEM = 1)	Mean = 9.6
Argentina	23	Denmark	1
Australia	7	Finland	1
Austria	9	France	1
Belgium	3	Italy	22
Brazil	27	Japan	47
Canada	10	Netherlands	11
Colombia	27	Norway	1
Germany	16	Sweden	1
India	25	Uruguay	1
Spain	17		
Switzerland	26		
United States	51		
Venezuela	24		
Unitary/Democracy (UNT/DEM = 1)	Mean = 2.4	Federal/ Dictatorship (FED/DICT = 1)	Mean = 18.6
Bangladesh	1	Comoros	3
Chile	1	Czechoslovakia	2
Ecuador	1	Ethiopia	10
Greece	1	Malaysia	13
Guatemala	1	Mexico	32
Iceland	1	Nigeria	37
Ireland	1	Pakistan	4
Jamaica	1	Russia	89
Luxembourg	1	Tanzania	2
Mauritius	1	United Arab Emirates	7
New Zealand	1	Yugoslavia	6
Papua New Guinea	20		
Peru	1		
Philippines	1		
Portugal	2		
United Kingdom	4		
Unitary/Dictatorship (UNT/DICT = 1)	Mean = 4.7		
Algeria	1		
Bolivia	1		
Botswana	1		
Bulgaria	1		
Cameroon	10		
China	28		
Dominican Republic	1		
El Salvador	1		
Ghana	10		
Honduras	1		
Indonesia	27		
Korea	1		
Myanmar	7		
Nicaragua	1		
Panama	1		
Paraguay	1		
Sierra Leone	1		
South Africa	9		
Sudan	1		
Thailand	1		
Tunisia	1		
Vietnam	1		
Zambia	1		
Zimbabwe	1		

Hypothesis

Based on the theoretical and empirical literature as a whole couple with intuition, the hypothesis is as follows:

- 1) Democracy should result in higher levels of FDI because it lowers political risk.
- 2) Federalism should result in higher levels of FDI (even on top of democracy) because it lowers political risk even more and it have the positive outcomes of competition between lower level political units and a joint-reputational set-up between the central and local governments.

Empirical Analysis

The analysis studies the impact of the form of governance on four dependent variables related to FDI. The time period over which these variables are studied is from 1970-1998 and although 73 countries were originally selected for the study as shown above, ultimately 71 yielded sufficient enough results to be included (Myanmar and Yugoslavia were excluded). The way in which the dependent variables are treated differs from the way they are treated in much of the existing literature; the author believes this is another area in which this study improves upon previous ones. Previous work looks at each year as a data point and studies the effects over time. This paper looks at the average of the 1970-1998 time period instead because the author believes an average can more effectively answer the question at hand. Once a country becomes a democracy or a institutes enough policy decentralization to be considered federal, the hypothesis assumes that the FDI should increase. If two countries are federal and FDI for one of them

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increases over time and FDI does not increase for the other, then the increase must be due to some other factor than its form of governance. Thus, a study that analyses the data on a yearly basis incorporates changes in FDI caused by other factors.

The four dependent variables are Total Investment (*CI7098*), FDI inflow as a percentage of GDP (*PCTFDI7098*), Net FDI (i.e. FDI inflows – outflows) as a percentage of GDP (*FDINET7098*), and FDI inflow per capita (*FDIPC7098*).

Total investment is a measure taken from the Penn World Tables (PWT) database version 6.2. The variable is defined as the Investment Share of CGDP, where CGDP is the Real Gross Domestic Product Per Capita. The number associated with each country is a percentage. An entry of “10.0” means that total investment (per capita of course) is 10% of CGDP. The purpose of this variable is simply to see if governance impacts investment overall. This seems to be just as interesting of a question as whether or not it impacts FDI in particular.

FDI inflow as a percentage of GDP utilizes two sources of data. The FDI inflow data (in \$US) comes from the International Monetary Fund (IMF). The GDP is calculated using data from PWT using the variables CGDP and population. The purpose of studying FDI as a percentage of GDP instead of the level of FDI is to eliminate the effect of the size of the economy. Smaller economies will naturally have smaller levels of FDI inflow, but that does not necessarily mean that they don't have favorable policies toward FDI. As a percentage of the size of their economy, FDI may still contribute an enormous amount of capital. Net FDI as a percentage of GDP essentially does the same thing as *FDIPCT7098*, but it looks at the FDI inflows minus the FDI outflows (both from the

IMF) as a percentage of GDP. Essentially, this variable enables to see whether or not democracies and federal governments seem to be capital importers and exporters.

FDI inflow per capita just takes the FDI inflow data from the IMF and divides by the population from PWT. The purpose of this is exactly the same as *FDIPCT7098* but it simply provides a different technique for studying FDI while eliminating the effects of the size of the market. It simply eliminates the effect of size of the country in a different way; the expectation is that the results should be very similar given either variable.

The independent variables are the forms of governance taken from Dr. Inman. They are described in detail in the "Forms of Governance" section in the "Definitions" section. There are five variables; they are *FEDDEM*, *ADMFEDEM*, *UNTDEM*, *FEDDICT*, and *UNTDICT*. In the data, a 1 is assigned to the category under which the country falls and a 0 is assigned to the rest of the variables. In the analysis, when studying the effect of democracy on our dependent variables, we create an additional variable called *DEM*. $DEM = FEDDEM + ADMFEDEM + UNTDEM$. Similarly, when studying the effects of federalism we look at a new variable $ALLFEDEM = FEDDEM + ADMFEDEM$.

Later in the paper, in order to make sense of the results that follow, another independent variable called *HJGADP* is introduced. This variable is essentially a measure of economic rights on a scale from 0-1. More formally it is the following:

The Hall-Jones index of government anti-diversion policies, created for the years 1986-1995 as a measure of a government's enforcement of law and order and control of corruption (scaled from 0-1, higher score representing policies supportive of private economic activity). Mean = 0.66 (S.D. = 0.21) Source: Hall and Jones (1999).²⁴

²⁴ Inman, Robert. (2007) "Federalism's Values and the Value of Federalism", *CESifo Economic Studies* **53**, 522-560.

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This is an important variable because of it impacts our dependent variables quite significantly, and it explains something about federalism's impact.

In terms of controls, various variables were considered. These include GDP, GDP per capita, growth rate, trade openness, infrastructure, legal origin, and market based vs. bank based capital market structures. In the various regressions that were ran and analyzed different sets of controls were used. Ultimately however, this added levels of complexity beyond the scope of this paper in terms of many of the theoretical implications. Thus, the main control that was utilized in performing the analysis whose resulted are presented here was a variable called *ABSLAT*, which is the absolute latitude from the equator. This is an effective control variable because it captures a lot of the differences in history between countries that have led to their level of economic development. Dr. Inman writes that *ABSLAT* “serves as a control for the country's location and climate and has proven to be an important fundamental determinant of economic growth, incomes and a country's colonial legacies”.²⁵

The following tables give summary statistics for the variables described within this section. The purpose of these is to get a general sense of the data looks like.

Table 2:

Dependent Variables					
Variable	Obs	Mean	Std. Dev.	Min	Max
<i>CI7098</i>	71	18.70	7.83	3.74	34.45
<i>PCTFDI7098</i>	71	0.62	0.58	0.00	2.64
<i>FDINET7098</i>	71	0.17	0.67	(1.90)	1.99
<i>FDIPC7098</i>	70	62.75	94.68	0.00	457.87

This table informs us that on average, total investment in a country is about 18.70% of its GDP, FDI inflows are about 0.62% of GDP, FDI net inflows are about 0.17% of GDP

²⁵ *Ibid.*

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(and that on average countries are importers of FDI since a negative number indicates they are an exporter of FDI), and that FDI per capita is \$62.75.

Table 3:

Dependent Variables					
Variable	Obs	Mean	Std. Dev.	Min	Max
<i>CI7098</i>	33	15.29	7.95	3.74	33.12
<i>PCTFDI7098</i>	33	0.41	0.43	0.00	1.92
<i>FDINET7098</i>	33	0.29	0.61	(1.79)	1.99
<i>FDIPC7098</i>	33	12.42	19.77	0.00	96.38

This table is the same as before except all of the democracies have been removed (recall the *DEM* variable defined previously). It seems that most dependent variables fall (18.70 → 15.29, 0.62 → 0.41, 62.75 → 12.42). The objective of running the regressions we do is to see if these reductions are actually statistically significant.

Table 4:

Form of Governance	PCTFDI7098	FDINET7098	FDIPC7098	CI7098
<i>FEDDEM AVG</i>	0.84	0.14	121.37	22.26
<i>FEDDEM STDEV</i>	0.71	0.64	126.51	5.39
<i>UNTDEM AVG</i>	0.81	0.47	77.95	17.13
<i>UNTDEM STDEV</i>	0.67	0.61	97.84	5.96
<i>ADMFEDEM AVG</i>	0.75	(0.43)	122.49	25.90
<i>ADMFEDEM STDEV</i>	0.56	0.63	110.68	5.13
<i>FEDDICT AVG</i>	0.44	0.14	17.41	15.31
<i>FEDDICT STDEV</i>	0.60	0.84	31.02	7.69
<i>UNTDICT AVG</i>	0.39	0.35	10.25	15.29
<i>UNTDICT STDEV</i>	0.35	0.48	12.60	8.23

Table 4 shows very simple averages and standard deviations for each dependent variable, categorized by the independent variables. Since this initial quick and dirty analysis seems interesting (as we see that Dictatorships have much lower averages than the others), we expect the regression analysis to tell us a story somewhat consistent with the hypothesis.

Empirical Analysis Results

The results of the regressions are provided in the following tables along with basic interpretations. The “Conclusion” section fits these interpretations in with the theoretical analysis provided earlier and it attempts to understand the implications of the results.

See tables 5, 6, and 7 below.

Table 5:

Dependent Variable	Independent Variables	Variable of Interest (Vol)	Coefficient of Vol	P > t	R-squared
CI7098	ABSLAT DEM	DEM	2.698	0.115	0.372
PCTFDI7098	ABSLAT DEM	DEM	0.295	0.048	0.143
FDINET7098	ABSLAT DEM	DEM	0.013	0.939	0.132
FDIPC7098	ABSLAT DEM	DEM	56.289	0.005	0.422
<i>CI7098</i>	<i>ABSLAT DEM FEDDEM</i>	<i>FEDDEM</i>	1.729	0.427	0.378
<i>PCTFDI7098</i>	<i>ABSLAT DEM FEDDEM</i>	<i>FEDDEM</i>	0.081	0.671	0.145
<i>FDINET7098</i>	<i>ABSLAT DEM FEDDEM</i>	<i>FEDDEM</i>	0.059	0.789	0.133
FDIPC7098	ABSLAT DEM FEDDEM	FEDDEM	28.658	0.259	0.434
CI7098	ABSLAT DEM ALLFEDDEM	ALLFEDDEM	4.665	0.035	0.413
<i>PCTFDI7098</i>	<i>ABSLAT DEM ALLFEDDEM</i>	<i>ALLFEDDEM</i>	(0.082)	0.675	0.145
FDINET7098	ABSLAT DEM ALLFEDDEM	ALLFEDDEM	(0.471)	0.034	0.189
<i>FDIPC7098</i>	<i>ABSLAT DEM ALLFEDDEM</i>	<i>ALLFEDDEM</i>	13.595	0.614	0.425
<i>CI7098</i>	<i>ABSLAT DEM ALLFEDDEM FEDDEM</i>	<i>FEDDEM</i>	(1.165)	0.649	0.415
<i>PCTFDI7098</i>	<i>ABSLAT DEM ALLFEDDEM FEDDEM</i>	<i>FEDDEM</i>	0.181	0.429	0.153
FDIPC7098	ABSLAT DEM ALLFEDDEM FEDDEM	FEDDEM	31.016	0.311	0.434

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Table 6:

Dependent Variable	Independent Variables	Variable of Interest (Vol)	Coefficient of Vol	P > t	R-squared
All Democracies Dropped (FEDDICT AND UNTDICT LEFT)					
<i>CI7098</i>	<i>ABSLAT FEDDICT</i>	<i>FEDDICT</i>	(0.227)	0.939	0.102
<i>PCTFDI7098</i>	<i>ABSLAT FEDDICT</i>	<i>FEDDICT</i>	0.061	0.716	0.046
<i>FDINET7098</i>	<i>ABSLAT FEDDICT</i>	<i>FEDDICT</i>	(0.196)	0.403	0.055
<i>FDIPC7098</i>	<i>ABSLAT FEDDICT</i>	<i>FEDDICT</i>	7.491	0.327	0.057
All Dictatorships Dropped (FEDDEM, ADMFEDDEM, AND UNTDEM LEFT)					
<i>CI7098</i>	<i>ABSLAT FEDEM</i>	<i>FEDDEM</i>	1.807	0.289	0.461
<i>PCTFDI7098</i>	<i>ABSLAT FEDEM</i>	<i>FEDDEM</i>	0.104	0.623	0.128
<i>FDINET7098</i>	<i>ABSLAT FEDEM</i>	<i>FEDDEM</i>	0.048	0.834	0.175
<i>FDIPC7098</i>	<i>ABSLAT FEDEM</i>	<i>FEDDEM</i>	33.022	0.292	0.395

Table 7:

Dependent Variable	Independent Variables	Variable of Interest (Vol)	Coefficient of Vol	P > t	R-squared
<i>HJGADP</i>	<i>ABSLAT FEDEM</i>	<i>FEDDEM</i>	0.127	0.003	0.630
<i>HJGADP</i>	<i>ABSLAT FEDEM DEM</i>	<i>FEDDEM</i>	0.075	0.088	0.667
<i>HJGADP</i>	<i>ABSLAT FEDEM DEM</i>	<i>DEM</i>	0.101	0.008	0.667
<i>CI7098</i>	<i>ABSLAT HJGADP</i>	<i>HJGADP</i>	23.234	0.000	0.498
<i>PCTFDI7098</i>	<i>ABSLAT HJGADP</i>	<i>HJGADP</i>	1.874	0.000	0.273
<i>FDINET7098</i>	<i>ABSLAT HJGADP</i>	<i>HJGADP</i>	0.251	0.665	0.131
<i>FDIPC7098</i>	<i>ABSLAT HJGADP</i>	<i>HJGADP</i>	303.116	0.000	0.527

The first part of Table 5 shows that being a democracy is correlated with higher levels of total investment and FDI inflows. For this type of analysis, an R^2 of over 0.300 is reasonable and we achieve values beyond that threshold for *CI7098* and for *FDIPC7098*. The most relevant dependent variable is *PCTFDI7098* and we see that the coefficient of *DEM* in this regression is 0.295%. Thus, this regression tells us that being a democracy increase FDI inflows to a country by 0.295% of GDP.

The second part of Table 5 seeks to understand the additive effective of being a federal democracy once a country is already a democracy. Thus, it seeks to answer the question: How does adding federalism on an existing democracy impact FDI? Looking at

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all four regressions, the results show that there is no statistically significant impact of federalism on FDI once a country is a democracy. The third part of Table 5 answers essentially the same question as the second part; the difference is that it includes administratively federal democracies along with federal democracies. An administrative federal democracy is essentially “de facto” federal. The exact methodology to determine what makes it “de facto” federal is based on the percentage of total government revenues coming from local governments. The data indicates that being either type of federal, “de facto” or constitutionally federal does improve upon total investment. Furthermore, it indicates that countries that can be classified in *ALLFEDDEM* tend to be exporters rather than importers of capital. This makes sense considering our intuition that countries such as the United States, Australia, and Germany tend to be capital exporters rather than importers. Nonetheless, this regression fails to tell us what we thought we would hear; Federalism seems not to help attract FDI inflows for an existing democracy.

Part four looks at whether or not being specifically federal (constitutionally as opposed to “de facto”) impacts FDI in any way. There is no statistically significant difference between the two.

Table 6 attempts to isolate the effects of federalism from democracy. The idea is that even if we do not see federalism improving upon democracy in the overall data, perhaps adding federal structures (i.e. policy decentralization and the other criterion from Weingast's analysis) helps non-democracies (i.e. dictatorships). Surprisingly, adding policy decentralization to a non-democracy does nothing to help any of our dependent variables! This result helps us to understand the essential role of democracy in attracting FDI and total investment. A similar attempt to isolate the effects of federalism is

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presented in part 2 of Table 6. The data shows that once you consider all democracies, being federal in addition to being democratic does not help you attract FDI.

Finally, Table 7 studies the effects of the variable *HJGADP*, which quantifies the economic rights of a country. This part of the analysis is where we see a lot of interesting and exciting results. The first part of the table shows that federalism positively impacts *HJGADP* (this is a similar result to Inman's) and with an $R^2 = 0.630$, we can be confident that this regression explains federalism's impact of *HJGADP* well. Secondly, we learn that being a democracy plays, like being federal, plays a key role in determining a country's economic rights. Democracy actually plays a more important role than federalism, since it has a coefficient of 0.101 (on a 0-1 Scale variable) and federalism has a 0.075 coefficient.

The last part of Table 7 explains a lot about our dependent variables. It indicates that *HJGADP* is very important in determining *CI7098*, *PCTFDI7098*, and *FDIPC7098*. It has a coefficient of 23.234 when regressed on *CI7098* (mean = 18.699), 1.874 on *PCTFDI7098* (mean = 0.617), and 303.116 on *FDIPC7098* (mean = 62.754). *HJGADP* has quite a large impact!

Conclusion

Before reaching conclusions based on the simple statistics used in this study, it is important to acknowledge that numerous other factors can impact the dependent variables. These can include a country's legal origins, culture, goals, development stage, etc. Our research does not account for not explain the implications of all of these other possible factors, as such a comprehensive analysis is far beyond the scope and objective

of this paper. The conclusions drawn here ignore these other effects and leave the understanding of the other variables up to future studies.

As discussed in the literature review, a MNC's decision to invest in a particular foreign country depends heavily on the level of political risk present in that nation. We expected that both democracy and federalism (although federalism was the primary focus of this study) would lower the political risk of a country and thereby attract higher levels of investment (both total and FDI inflows). **(1)** The first conclusion we can draw from the results is that democracy certainly does impact our dependent variables; its coefficient on total investment (*CI7098*) is 2.698 (mean = 18.699), on FDI inflows as a percentage of GDP (*PCTFDI7098*) is 0.295 (mean = 0.617), and on FDI per capita (*FDIPC7098*) is 56.289 (mean = 62.754). Thus, democracy seems to lower a government's political risk and this in turn encourages FDI inflows.

(2) The second conclusion, which contradicts our intuition and expectations from the theoretical literature, is the federalism does not add much to democracy in terms of lowering political risk more to attract even higher levels of FDI inflows. This result is consistent with Jensen and McGillivray's findings. They find the following:

The additive effective of combining federalism and democracy ... is small. As we suspected, democratic countries are already regarded as trustworthy, so the additional credibility provided by federalism has little effect on FDI.²⁶

We find the same result, which is evident from the regression summaries in Table 5.

(3) The third conclusion we draw is that federalism does not help nondemocratic countries attract higher levels of FDI. This result can be seen from the regression

²⁶ Jensen, Nathan and McGillivray, Fiona. "Federal Institutions and Multinational Investors: Federalism, Government Credibility, and Foreign Direct Investment," *International Interactions* **31**, 303-325.

summaries in Table 6. This result contradicts the findings of Jensen and McGillvray, who found that “federalism has a strong effect on the integrity of nondemocratic countries”.²⁷ Our results show that democracy matters most and that federalism without democracy does not do anything to increase investor confidence. This is not entirely surprising based on Weingast’s work. (F2), one of the criteria for being federal, states that “the *autonomy* of each government [must be] institutionalized in a manner that makes federalism’s restrictions self-enforcing”. It seems natural to assume that democracy provides the structure to make these restrictions self-enforcing. Without democracy, the federal structures do not hold as much weight; thus, investors do not have the confidence in these nondemocratic federal nations as they do in democratic countries.

It seems at odds with the theoretical literature that federalism has absolutely no impact on FDI inflows (via political risk) above and beyond the impact of democracy. Is our analysis and application of Weingast, Inman, etc. incorrect? This may not necessarily be the case. Table 7, in which we introduce *HJGADP* may provide some explanation as to what federalism does contribute above and beyond democracy. See Figure A, which is a short version of one created by Inman, and changed slightly to make it relevant to this study.²⁸

Figure A shows that both democracy and federalism contribute to economic rights (*HJGADP*). Then economic rights contribute to the dependent variables we studied (FDI inflows importantly). **(4)** The fourth conclusion is that this impact on economic rights is federalism’s unique contribution toward attraction of FDI above and beyond what democracy alone can do. Federalism enhances those property rights that lower the

²⁷ *Ibid.*

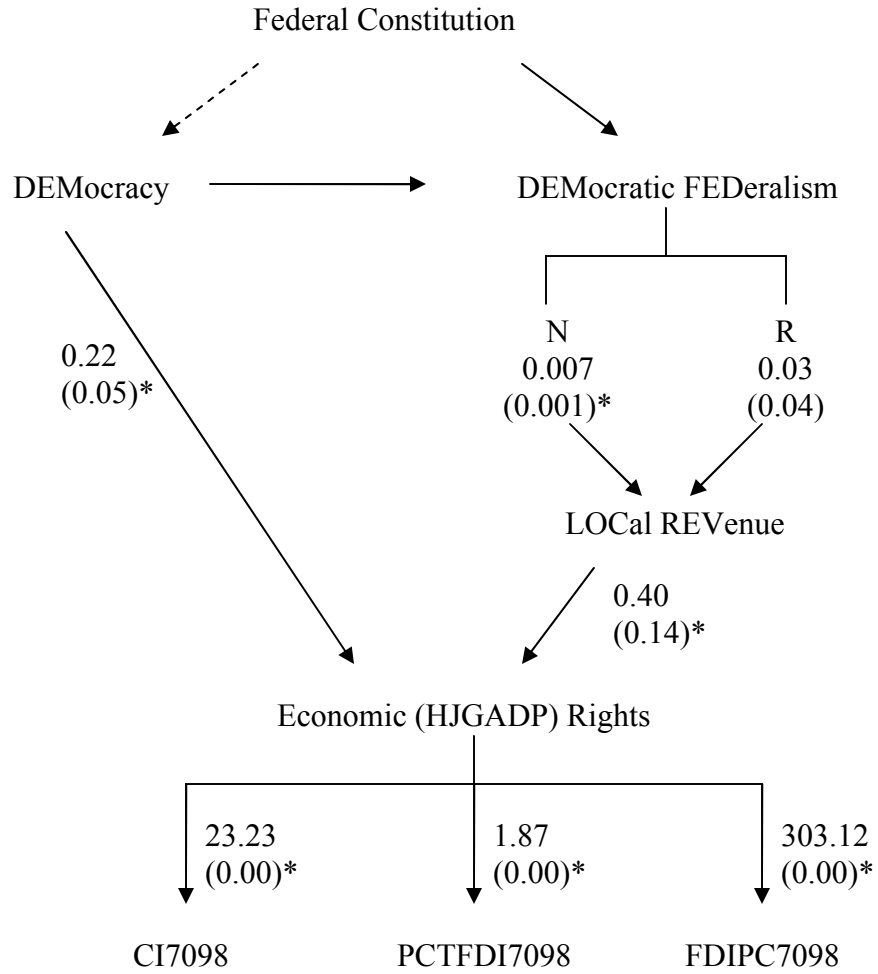
²⁸ Inman, Robert. (2007) “Federalism’s Values and the Value of Federalism”, *CESifo Economic Studies* **53**, 522-560.

political risk of a country and thereby attract FDI. Although this manner of looking at the situation provides some insight, it also adds confusion. Presumably, we should see this effect directly; federalism should directly impact FDI as well by transitivity. Despite effort, the author is unable to untangle the effects and understand why one impact is present and the other is not. Plausibly, if economic rights consist of a variety of factors, federalism contributes to those factors that have less to do with FDI than democracy does. This is speculative however and does not sufficiently satisfy the confusion. We leave the untangling of this confusion to future research.

Ultimately, this paper finds that if a country wants to attract FDI, regardless of the merits of the arguments claiming that it promotes economic growth, it needs to become a democracy. Becoming a democracy makes the country a safer place to invest for MNCs because it lowers the political risks of nationalization and the enactment of unfavorable legislation. Additionally, going one step further and becoming a federalist democracy (either constitutionally or “de facto”, the study finds no statistically significant difference between the two) will help increase its economic rights and these in turn will attract FDI. Thus the empirical analysis seems to validate the theoretical research, but some surprising results do emerge.

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Figure A



Note: * Indicates statistical significance at the 0.05 level or higher.

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