Continuous Refinement of the Government's Role in the Financial Markets

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A theoretical role for the government in the financial markets consists of: regulation (passive rules), intervention (active discretion), and their personal financing needs. Three of the most important regulatory rules for maintaining a stable economy are: a clear understanding of the fundamental role of the financial intermediary (saving, lending, and risk hedging), the use of interest rate caps, and implementation of an effective profit allocation scheme. To measure the personal use of the financial markets by governments, their presence on foreign exchanges is examined to note discrepancies from the theoretical norm. A government listing guide is provided that details the listing preferences of foreign governments onto stock exchanges. The preferred foreign exchanges for governments are: Frankfurt, Luxembourg, London, and Switzerland.

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I. Financial Markets

In a world of ever tenuous financial markets, it is inevitable for there not to be consistent and persistent change in the structure of economic decision making. Interest rate caps and a profit allocation scheme, two instruments we already see in place today, could become more important, or at least better utilised, as our financial markets continue to grow through the next century. Laws are passed all the time which cap interest rates, and we see profit allocation schemes from the central bank to the Treasury in most fiat nations. What there is not, however, is substantial profit redirection from the financial institutions to the Treasury, nor is there interest rate caps on a majority of products, and when they are present, they usually are not too low. As such, absolute interest caps and a 100% profit allocation scheme are not likely to ever occur; there are simply too many other influences on the economy for any pure theoretical construct to usually work correctly in the economics discipline. What is certain, however, is that the governments of today seem to cater too much to the financial institutions, which is odd, as the government is the one that prints the money that the financial institutions need to function. To this author, it seems that given the intrinsically worthless nature of fiat money, there should be minimal excessive profit allowed to financial institutions by the government, which makes the money and effectively indirectly controls the financial institutions. Further, from a pure theoretical standpoint, charging more interest than is worth the time value of money, with relevant risks hedged in, seems unfair and inefficient to the economy at large, and is something the government should ostensibly strive to prevent.

The empirical study presented in this paper follows this theoretical rationale, which is also elaborated on in the following paragraphs. The statistical analyses concern government dispersion in the financial markets, such as how much they use the foreign financial markets and which markets they prefer. It is assumed that the home government should be able to find sufficient financing from its own capital markets, so as to ensure a healthy equilibrium in the domestic economy. There are instances, however, where the government will need to look to foreign financial markets, though these instances should theoretically be few and far between. As such, North America makes extensive use of the international financial markets for their government financing needs, more so proportionally speaking. There are, however, many UN financial institutions and and other international organisations located in New York and Washington DC, and so the impact of all these organisations being located in the USA should not

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be overlooked. As *Table I.* shows, even though Europe comprises 57% of the total government issuances in the financial markets, they also make up 55% of the entities, which suggests balance, and is what we see in all the other regions except for North America. In North America, there is a 10% difference between entities and issuances, and even bigger for the USA alone, which will invariably lead to disturbances in the global financial markets.

If one country or region is acting with disregard to the most important part of society, the financial markets which allow us to live our lives the way we do, then it is inevitable that serious consequences will arise to all parties involved. It is simply very difficult to maintain balance for all parties involved when there are entities flouting the legal and ethical standards. For example, Asia has 10% of the entities and 7% of the issuances. If North Americas was more restrained in their government actions in the financial markets, Asia's share of the issuances would likely be around 10%, or equal to their amount of entities listed. This follows for the all the world regions, except for Europe, though as discussed later Europe is the government financing capital for the world, so if any region should have a disproportionate share it would be Europe, though they don't. Thus, if one region is over-utilising the financial markets, it not only tilts the balance in their favour from the extra financing, it also takes away financing from other regions, albeit indirectly. This is not something that is necessarily nefarious in any way, rather it is a clear imbalance in the global financial markets by the governments of the world, and is something that if it were addressed and the governments understood their mistakes better, then more stability and less contagion consequences in the global financial markets could be achieved. One important caveat regarding the USA's governments' use of the international financial markets is that there are many international organisations located in the USA, and thus this likely is a major factor in the amount of government listings arising from the USA.

Table I. Dispersion of Governments in the Financial Markets by Region

	Region Totals			
	Entities	Issues	% Entities	% Issues
N.Amer	94	1486	0.15	0.25
S.Amer	50	373	0.08	0.06
Europe	346	3408	0.55	0.57
Caribbean	25	87	0.04	0.01
Asia	61	403	0.1	0.07
Oceania	23	73	0.04	0.01
Africa	28	113	0.04	0.02
Totals	**627**	**5943**		

This table shows the current listings of government's in the financial markets as of January 2010. Even though it only shows current listings, due to the fact the nature of debt demands that it usually be listed for a lengthy time, and that most governments' offerings are for debt, this information can still be considered representative of government trends and preferences in the international financial markets.

In this study the theoretical role for the government is analysed, and the results of a study on government activity in the international financial are presented. A theoretical framework of the government's involvement in the financial markets suggests that the actions of a government in the financial markets consists of three aspects: regulation, intervention, and personal business needs *(equation 1).* Implementing proper regulation consists of aligning the political interests directing the economy with the fundamental role of the financial intermediary in a fiat monetary economy *(equation 2).* Empirics can also be utilised to analyse regulation through a study of interest rate caps, and to determine what a profit allocation scheme to the central bank would look like in this scenario *(equation 3).* Intervention, both standard and exceptional, can be analysed through the standard active monetary stabilisation policy tools used to influence the specific macroeconomic indicators such as the inflation, exchange, and interest rates, and through the exceptional entity-specific interventionary actions *(equation 4).* The government's personal financing needs can be statistically monitored with a review of the international stock exchanges, and is done so herein in conjunction with the theoretical framework presented *(equation 5).* To further analyse, the impact of the island economy pursuing these policies in an integrated global economy with similar and dissimilar foreign economies can be measured empirically pursuant to the relevant theoretical constructs.

The financial system is in many ways just like any other industry, yet is more important in many ways as well, as money forms the foundation for any industry's operations. Simply put, the financial markets must function for any other industry to operate, and thus the government must ensure that the financial markets are operating in order for the economy and thus the country to function. Two main issues emerge when the role of a government in the financial markets is discussed: (1) How much regulation and then intervention, or total oversight, does the government need to perform to ensure efficient operations of the economy at large? (2) How involved should the government itself be in utilising the financial markets to maintain their business operations? This study analyses the first primary undertaking, namely the government's role in regulation and intervention, from a theoretical perspective. The second primary undertaking, that of the government's personal business needs in the financial markets, is both theoretically analysed and empirically investigated in this study.

Government Financial Market Action = (Regulation + Intervention)[1] *+ Personal Needs*[2] *(1)*

The theoretical framework of the government's action in the financial markets involves three primary aspects: regulation, intervention, and the government's personal financing needs. Continuing with the theoretical assumptions of the regulatory component, the fundamental role of the financial intermediary in a fiat monetary economy can be simplified as having three distinct purposes: holding savings, lending those savings, and performing risk hedging procedures for genuine business needs. These fundamental roles for the financial intermediary can be further aided in effective regulation with the implementation of interest rate caps and a profit allocation scheme, from which the need for government intervention via active discretion and extraordinary measures will be reduced. The personal financing needs should theoretically be satisfied within the domestic markets before looking to foreign markets.

Financial Intermediary Action (FI ACTN) = Saving + Borrowing + Risk Hedging (2)

Regulation = FI ACTN + Interest Caps + Profit Scheme (Passive Rules) (3)

Intervention = Standard + Exceptional (Active Discretion) (4)

Personal Needs = Domestic + Foreign (5)

[1] First primary undertaking.

[2] Second primary undertaking.

The nature of economics suggests that these questions are as much political as theoretical in nature. Oftentimes the theory of economics is just that; it is what the desires of the current political regime are. For example, if the government wants to help its corporations sell more product in the international market, the government will inflate its currency to make its products cheaper to other countries. If the government wants to increase the value of its currency through deflation, they will empower the citizens of the country to purchase more foreign products via a stronger domestic currency, thereby raising imports and lowering exports. These are changes which can occur overnight, in line with the changes in political doctrine. Thus, there really is no prescribed economic dictate that works for every country; rather each nation tailors their economic policies to a mix of ideologies in order to appease the major interests in that country.

Any modern 21st century nation utilises a fiat monetary system, including those in Africa, Asia, the Americas, and Europe. As such, the theoretical assumptions suggested in this treatise will hold firm for any fiat monetary nation, and may be preferable for the greater good of the citizens, although admittedly at the expense of some of the wealthy in the financial sector. No industry wants regulation; they want to be able to do whatever they want, and the financial services industry is no different. What separates the financial services industry from any other, and urges that ironclad regulation be applied to the financial intermediaries, is that they, like the intrinsically worthless fiat money we use, are arguably illusions and creations of a fiat monetary society. Consequently, it could be said that if they are treated as such, then that nation which identifies the financial intermediary as an obsolete mechanism at the will of the government to solely satisfy the citizens' borrowing, saving, and risk hedging needs, may see a reduction in crime resulting from income inequality.

There are simply many things we cannot absolutely control, including the economy, as well as anything else which can be influenced by nature. As such, many interventionary active monetary stabilisation policy techniques are moves of vanity which can be mitigated with effective passive monetarist rules demanding prudent regulation. Human nature can lead to a desire to want to be in absolute control or have absolute power; however, that kind of attitude is destructive and is reminiscent of the regimes of old world monarchs that many 21st century nations ostensibly dismiss. It is simply more intelligent to acknowledge that the 'invisible hand' in the economy is just that; it is something that we cannot measure or understand, and thus an effective fiat monetary society must use a responsible blend of passive and active monetary stabilisation policy.

I.A Foreign Influence

After making these theoretical assumptions for the island economy, the influence of foreign economies on the home economy's regulation, intervention, and personal financing needs must be addressed. The main way to insulate the domestic economy from negative effects by the foreign economy is with prudent policies. Zaman (2008) suggests that two prudent policies for reducing negative foreign influence are implementing proper strategies for attracting foreign direct investment, and maintaining a responsible budget deficit. By applying the theoretical constructs for the regulated island economy to a plot connecting them to foreign economies which pursue passive rules, active discretion, or a blend of both, possible scenarios can be deduced as to likely effects resulting from interactions with each. The most effective way to mitigate negative influence or contagion, once again, is with recognition of the proper domestic foreign policies, while keeping the foreign government's intent in mind.

I.B Four Issues in a Computerised Fiat Monetary Economy

There are many issues which arise when dealing with the nature of a computerised fiat monetary economy, all of which testify to the need for stringent government oversight (first primary undertaking) as well as for limited utilisation (second primary undertaking) of the financial markets by the government entity.

(1) How and to whom to assign liability in a globally integrated financial system, where buyers and sellers do not have to know anything about each other. The nature of a globally integrated financial system suggests that there are multiple conduits through which the initial funds may be transferred and/or allocated. Then, when processes such as securitisation happen and those funds are combined into new financially engineered products, neither the individuals nor the financial intermediaries know who owns what when they keep selling them to other financial intermediaries and investors. Thus, it is difficult at times to know both where funds originated from, as well as whose possession they may currently be in.

(2) Partly due to this ambiguous nature of the transactions, it is difficult to end relationships

with financial intermediaries. Forward contracts, currency swaps, and similar products, that involve obligations to multiple parties, make withdrawal from financial product contracts primarily difficult, and withdrawal becomes additionally difficult when one factors in the other much more complicated financial instruments that make it much harder to end a financial relationship. This means that anyone that needs limited liability, such as a government, should refrain from utilising the financial markets as much as possible. The above statement 'partly due' considers the fact that all transactions in any industry have an element of contractual professionalism to them, and thus any agreement or dealing will have some sort of delicacy required in ending the relationship.

(3) Following in theory, due to the configuration of the intertwined financial markets in a global society, it is difficult to know at all times how much liability one has, and thus how much more risk would be acceptable to take on. To understand how much more risk is acceptable, one must know both how much liability they currently have, and how much total liability they can safely take on. This holds true for individuals, businesses, and the government, yet is more relevant to the government's actions. The government must be more careful about over-extending itself than the other members of society, and thus must make much more conservative estimates of their liabilities, leading to less financial market activity that they can safely accept.

(4) Perhaps most importantly, due to the intrinsically worthless nature of money, there is no physical harm that can accrue from financial products, which makes the abuse of money centred products that much harder to vilify. Oftentimes money manipulation is chalked up to 'superior business acumen.' There is zero physical harm that accrues from banking policies. This is a fundamental difference between money and any other industry. Both in the manufacturing process and in the consumption process for goods, there is always inherent danger similar to that of everyday life. For the finance industry, there is none of this, which makes it seem okay to pursue these policies to their fullest extent. Thus, danger in the financial industry is much more understated, as financial crises show, as the problem may not become apparent until it is too late, and only moral fortitude or more restrictive government regulation would have prevented it.

These four issues are important to recognise; however, the two central undertakings of (i) regulation and intervention, and (ii) personal use by the government in the financial markets are hard to quantify. All societies value different ideals, and have differing economic and political interests that they need to pursue. The next section offers a few more opinions from the literature on the role of government oversight in the financial markets, and the rest of the paper then addresses the issue of the business needs of the government in the financial markets.

II. Views on Financial Market Oversight

Perspectives on government oversight (regulation and intervention) of the financial markets, the first primary undertaking, can essentially be separated into 'for' or 'against.' Usually one feels either that: a pure free market works, that extensive oversight is needed, or that a medium ground should be instituted. From an empirical perspective, typically when market prices rise, government regulation relaxes, and when prices fall, regulation becomes stricter. As such, Frankel (2009) suggests that regulation may be less meaningful to investors during rising markets, and more meaningful after a crash, because investors use prices as a surrogate for market integrity. In terms of trends, since the mid 1980s stabilisation of economic activity has focused on the effect on regulation by economic shocks, inventory management, monetary stabilisation policy, and primarily financial engineering (Dynan et. al., 2005). As such, different countries may have varying political goals to achieve, and thus divergent world regions will typically see varying levels of progression in and approach to the arena of financial market oversight.

In Africa, aggregate measures of financial intermediation show that credit supply has either stagnated or declined in most of the sub-Saharan African countries in the past two decades. Recent structural and institutional indicators of financial market development, however, show that a number of countries have made significant progress in promoting an environment that is conducive to financial intermediation (Ndikumana, 2001). In the Americas, investors do not appear to have fled the markets in the last 30 years as they did in the 1930s, possibly because some have been locked into investments for tax benefits, or maybe because there has been a charge to a corporate culture of honesty to attempt restore lost investor confidence in the USA (Frankel, 2002). Europe has traditionally been perhaps the most regulatory world region, as much European financial regulation is based on the disclosure paradigm to remedy market failure, discipline market actors, improve investor/consumer choice, and prevent abuse (Avgouleas, 2009). In Asia, since the financial crisis in the late 1990s, the markets have learned from their mistakes and have become more integrated and efficient than before the crisis (Yang et. al., 2003).

To summarise, Africa has seen some stagnation in their financial markets, all the while with their infrastructure getting more advanced. The Americas has seen greater stability as evidenced by the reluctance of many investors to flee their markets immediately following signs of weakness, as they did during the Great Depression in the 1930s. In Europe, which has traditionally been quite strict in terms of their oversight and government involvement, better disclosure has been a key area of improvement. Asian markets have experienced rapid growth over the last 20 years, and after their crisis in the 1990s, regulation seems to have been restored to higher levels than before. Financial derivatives have played a vital role in integrating the global financial system over the last 20 years, and have been very responsible both for the growth of the markets as well as the collapses in the markets we have seen. Thus, when considering regulation of the financial markets, the issue of regulation takes on very opposing sides when discussing the use of financial derivatives. The intrinsic nature of financially engineered products means that they will not work when heavily regulated, though if they are allowed to be used freely they have the potential to cause serious harm; therefore, the nature of financially engineered products lends to arguments both for and against strict regulation.

II.A For

Three of the arguments for regulation of the financial markets are that: (i) regulation actually improves business because it raises investor trust, (ii) disclosure is needed by companies so people can be confident that they are being treated fairly by the businesses, and (iii) because of the nature of financial derivatives, they must be restrained to function in their proper fundamental role. As there is a relationship between investors' trust and financial market regulation, regulated financial institutions benefit from oversight by offering issuers and investors government support in their efforts to gain investors' trust (Frankel, 2002). Further, progress in regulation will not only promote financial market development, yet it will also foster economic growth by: strengthening the institutional framework for banking regulation, promoting monetary stabilisation policy autonomy, establishing government and central bank credibility, and developing banking supervision, all of which will create an environment that is conducive to investment and saving (Ndikumana, 2001). Another reason strict regulation is needed is that most companies will only disclose what they have to, and even when they do they may do so in an ambiguous manner, as many risks are often fully disclosed yet the markets fail to understand them (Avgouleas, 2009). The nature of financial products also suggests tight regulation. Financial derivatives are complex tools that banks and corporations can use to better manage risk exposures; however, they can also be used recklessly for speculative behaviour (Siems, 1994). Thus, regulation may be beneficial in limiting the speculative use of said instruments.

II.B Against

Three of the arguments against regulation of the financial markets are that: (i) regulation will restrain economic growth, (ii) it will increase costs, and (iii) because of the nature of financial derivatives, they cannot be restrained to function correctly. Perhaps the most vocal argument against regulation is that it will usually restrain economic growth (this may actually be a good thing, however, because if the economy grows too fast it will just crash hard in the future; some people that are expecting the crash will profit wildly, though most people will suffer). Vass (2008) concurs that increased regulation and intervention occurring at the same time will throttle the innovative economic forces that unleash economic growth. Frankel (2009) also agrees, as he suggests that prior substantive regulation has an undesirable effect on innovations and the freedom of the markets, as well as regulating after a crash is undesirable and ineffective, and can be compared to reacting after the damage has been done. Increased regulation naturally raises overall costs, and accordingly, these costs may be a barrier to issuers. In terms of arguments against regulation of financial derivatives, Siems (1994) comments that laws that restrict derivatives' usage could undermine market efficiency in transferring financial risks, and consequently destroy the economic benefits provided by derivatives. In fact, some may propose that any regulation of the financial derivatives markets should emphasise the use of market-oriented incentives to manage risk, as opposed to government-mandated rules designed to eliminate the use of derivatives because of their potential riskiness. There has been little literature written on the personal use of the financial markets by governments, the second primary undertaking, and as such this matter is explored empirically in this paper.

III. Policy Implications and Empirical Tests

The theoretical framework for the role of the government in the financial markets includes three forms of action: regulation, intervention, and then personal financing needs (*equation 1*). It is the government's responsibility to clearly define through regulation what the fundamental role of the financial intermediary should be and what activities they theoretically should be involved in based on the prevailing political preferences in the society (*equation 2*). The implementation of interest caps for further regulation and the use of active monetary policy stabilisation tools for intervention needs can be empirically analysed, though a complete analysis of these aspects is best suited for a complementary study, as are the profit allocation procedures for a simplified financial intermediary system (*equations 3 and 4*). The third action of the government in the financial markets (and the second primary undertaking), that of their personal financing needs, is empirically analysed in this paper and is explained in the following paragraphs (*equation 5*). To analyse appropriate use of the financial markets for government personal financing needs, we can analyse the involvement of governments in the foreign stock markets, at a cross-sectional point in time, 2010, to determine if there is a distinguishable method of operation among major world governments for their business needs in the global financial markets. Further, considering the time it takes to delist from an equity listing and especially a debt listing, and that most government listings are for debt, this data can possibly even be considered representative for a rather significant time period.

For the methodology of the empirical analysis, first the major stock exchanges of the world are gleaned for foreign governmental entities listed on those exchanges. Then the gathered data is analysed for descriptive statistics, as well as for the evaluation of the hypotheses. Simple charts and observational comparisons best explain this empirical analysis. This may seem simplistic in terms of econometric methodology; however, for a qualitative categorical situation such as this a more straightforward analysis suffices. The international supranational agencies are included, as are the government-sponsored financial services institutions, central banks, and stock exchanges, in addition to the local, regional, and national entities. The sample includes the majority of these types of entities; however, there may be a slight level of misstatement due to the language and cultural differences between countries, as well as the personal perceptions as to what type of entity constitutes a government institution.

There are four research hypotheses presented in this study. The first hypothetical assumption suggests that an empirical analysis of this sort can shed light on whether there are governments which are overstepping their boundaries in regards to equitable utilisation of the global financial markets. As connected as today's markets are, it is highly important that the governments of the world play by the same rules, so as to ensure that a level playing field exists for all countries, and that the contagion effects are not disproportionately spread from irresponsible regimes to more restrained countries. This is a slightly ambiguous question to answer, as are many things regarding the effect of financial relationships in a global computerised fiat monetary society, though analysis of the data from this study suggests that there may be a disproportionate balance of governments on the foreign stock exchanges, in relation to both the world regions and to the individual countries.

The second hypothetical assumption suggests that by determining which countries' governments do use foreign stock exchanges for financing needs, those results can be compared to those countries which do not and to each other for types of listings in light of the 2008 credit crisis. This most recent financial event is a legitimate event for analysis because it has made clear which countries had relevant issues with their financial markets. This would show if there is a connection between countries that experienced upheaval in their financial markets in 2008, and those whose governments list onto foreign stock exchanges. Data from the study shows that there are in fact similarities between countries which experienced upheaval in their financial markets during the 2008 credit crisis, and those whose governments make extensive use of the foreign financial markets.

Hypothesis three conjectures three theoretical control assumptions. First, it is expected that governments will look to their domestic debt markets foremost for financing needs, and second, that those domestic markets are efficient enough so as to render it unnecessary for the government to feel as if they would be safer utilising foreign markets. Third, it is assumed that in some extreme cases, there will be governmental entities listed onto their domestic stock exchanges for equity purposes; this may not be ideal, yet is preferred to listing onto foreign exchanges for equity purposes. The reasons the government should not be listing for equity purposes is that the citizens already own the country, and it would essentially amount to a double incident of ownership, whereas the debt bonding is not a transfer of ownership, rather a promise of interest calculated at the time value of money for relevant risk assumption. The results suggest that governments do not always look to their domestic debt markets first for their financing needs, and that there may be many countries whose markets are not efficient enough so as to allow their governments to safely satisfy their financing needs from within. In regard to the third assumption of hypothesis three, there are in fact governmental entities that utilise their domestic equity markets, yet there are also instances of governments utilising foreign equity markets.

The fourth hypothesis investigated theorises that governments will look to foreign stock exchanges: when they have exhausted their financial markets (i.e., for better prices), when their financial markets are not stable, when there are legitimate cultural, political, or geographical similarities, or for stealth reasons. The findings show that governments do look to foreign stock exchanges for all these reasons; however, each region sees different levels of usage for each of the motives. The overall results from this study lead to a situation where the best analysis is done by the individual, as there is no prescribed doctrine as to how governments should be utilising the financial markets. One author's perspectives on the role of the government in the financial markets will likely be different from another's. As such, what this study attempts to do is to simply gather the data, offer a personal opinion, and then present the data and let the rest of the community decide for themselves what the proper course of action should be for government in the financial markets, based on the current level of activity.

IV. Regulation and Intervention

Referring to *equation (1),* the first primary undertaking regarding the role of the government in the financial markets concerns the degree of oversight. The government must both regulate the financial markets initially, as well as intervene in the markets when need be. The goal is perfect regulation, resulting in the need for little or no intervention. One must assume, however, that human nature will suggest that there will never be perfect regulation, and thus some intervention will likely always be necessary in order to respond to emotional actions. By recognising this failing of human emotion, strict regulatory controls over money can be instituted with some ease, resulting in scant need to unduly intervene in the financial markets with knee-jerk pastiche reactions.

The nature of money almost guarantees that the government must be highly involved in the financial markets. Money is unlike any other good, in that there is a nearly limitless consumption function for money. There is no diminishing return of value for money--most people always want more. Once you eat two hamburgers, there is a limited satisfaction that accrues from consuming the next one; once you have four cars, there is limited value or worth from spending more money to buy another car. There are always exceptions, as some people will eat 10 hamburgers, and some people would buy 10 cars just because; however, there are far fewer people that would turn down 100,000 more dollars just because they already have enough. The financial services industry needs to be much more regulated than any other industry, with strict mandates banning financial engineering, absolute interest caps, and an effective profit allocation scheme in order to achieve the delicate balance it serves in fuelling the economy. In fact, banking is perhaps the most straightforward industry, yet it has limitless options for innovation and profit creation when not regulated. Of course there are thousands of great financial products which can be defined and offered, though that does not suggest that it is healthy to indulge oneself in them.

Left unchecked, the money business will grow into a monster just as any large monopoly or oligopoly does. Heavy regulation is never favoured by the industry being targeted, which is to be expected, as rarely would anyone want to change his ways when he is being very profitable from them. Theoretically speaking, regulation and intervention in economics is a political process, and as the banking industry would obviously prefer less oversight so as to increase their profits, if bankers have open access to politicians, then the level of regulation and intervention may not be adequate. Considering the highly political and closed-door nature of the oversight process in a fiat monetary society, it is difficult to qualitatively assess levels of regulation and intervention within and among countries, short of an indicator variable for 'more' or 'less'; this is because unless all procedures are followed to their fullest, the economy will essentially remain at a 'less' stage. For this reason, it is beneficial to identify the distinct qualitative attributes of an efficient financial system, defend their merit from a theoretical standpoint, apply quantitative experimentation where possible, and then hope that the financial services industry does not have too much sway over the government so as to ensure that we see the proper financial methods implemented for the society at large. That said, even though it is difficult to gauge where each country may be in the regulation and intervention evolutionary path, the theoretical assumptions presented herein can still be applied to each nation and to the world economy at large, by utilising the theoretical constructs and any supplied quantitative data.

The primary debate then emerges as to what explicitly could be done to introduce more passive monetary rules (regulation) into the active monetary stabilisation policy (intervention), which would maintain sufficient discretion for policymakers to intervene in extreme circumstances. This would suggest that policymakers could still intervene in the economy with open market operations, reserve ratios, and discount rates, while ensuring with prudential regulation that the financial institutions stay honest to their fundamental purposes of simply (i) facilitating transfers of money (saving and lending) and (ii) hedging risk for legitimate business needs, by capping interest rates and reducing the types of services they are allowed to offer coupled with the implementation of a profit allocation scheme.

IV.A Regulation

Passive monetarist stabilisation rules can be considered regulation, per *equations (2) and (3).* As such, what might regulation entail? Greater stabilisation often leads to lower crime; so actually, it is greatly to the wealthy class's benefit to ensure equitable distribution of funds, so as to ensure that their children can be safe when they go out in public. Perhaps all that is needed are explicit interest rate controls for borrowing and lending purposes, implementation of a profit allocation scheme, and an acknowledged mission of the financial intermediaries by the government of simply serving to distribute funds between savers and borrowers. The facilitation of saving and lending to promote economic growth is the innate purpose of the financial intermediary, and as such, the ideal government may seek to advertise these objectives as so.

There are many different opinions as to what regulation of financial intermediaries should encompass. Frankel (2009) suggests both following prices more intently to recognise potential problem areas where bubbles or crashes could occur, and examining closely certain entities, such as: those that are too large to fail, those that are highly leveraged, those whose share price fluctuates excessively, and those that have obtained exemptions from regulation. Further, the creation of government deposit guarantees can mitigate bank runs and preserve stability throughout the financial system, as can examinations of the existing conditions in the banking sector and in non-bank intermediation (Zaman, 2008). Devoting attention to the different types of deposits, such as retirement savings accounts and pensions, and integrating regulation across various types of investment accounts, can help reformers recognise the fragmentation of regulatory authority, and as such there usually must be some sort of division of regulatory authority (Muir, 2009). Disclosure may also be considered as a means of regulation, though Avgouleas (2009) suggests that insertion of default options in a variety of financial contracts for retail investors, as well as the creation of an independent financial products committee, may be a better regulatory protection strategy than just enhanced disclosure. Avgouleas further warns that disclosure-based market discipline in the banking sector often fails because of the implicit government guarantee, and in the case of capital markets, disclosure may fail because of product complexity and the impact of socio-psychological factors. Nevertheless, three of the most important regulatory actions are: clear understanding of the fundamental role of the financial intermediary, use of interest rate caps, and implementation of an effective profit allocation scheme.

IV.A.A. Role Definition

As the financial intermediary grows within the economy, it often will want to offer other financial products in order to hedge legitimate business disruptions in both the domestic and international economy *(equation 2).* Goods which are hedged would be those needed for pertinent business needs, such as raw materials in the domestic economy, and currencies and possibly raw materials in the international economy. Relevant government regulation of the financial markets could therefore entail limiting hedges to necessary goods and currencies for business purposes; or, to put it another way, regulation would simply not allow speculative trading by bankers with more information than the society. This speculative trading is actually comparative to insider trading or abuse of government authority. This does not mean that financial products comprised of legitimate concrete securities cannot be bought and sold for investment purposes amongst the wealthy, or that the individual securities could not be bought and sold. What this does suggest is that the use of purely speculative financial products serves to primarily enrich those with the most information, and thus often causes severe disruptions in other sectors of the economy. Yes, there are examples of speculative hedge-happy entities profiting, though there are also instances of them failing and causing horrible harm to the society, such as Long Term Capital Management (LTCM) in 1998 or the 2008 Banking Crisis. Bona fide explanation of the fundamental role of the financial intermediary prevents institutions from being able to use financial or economic rationalisations to get around the actual law when the time lag for new laws has not quite caught up to society's progress.

IV.A.B. Interest Rate Caps

Interest rate caps could prove very stabilising for a fiat monetary society. They ensure that the financial institutions remain honest to their primary mission of facilitating the transfer of funds between savers and borrowers and hedging risk for legitimate business needs, by allowing no incentive to take advantage of the savers and borrowers. Interest caps is actually a quite primitive concept, going back throughout mankind. Even today, interest is banned and is a punishable offence in Islamic nations observing Shariah, for example. Yes, interest allows for greater risks to be taken and thus quicker growth, yet at what long-term cost? Consequently, a beneficial insertion into the passive monetary stabilisation rules which regulate the economy is the implementation of stringent interest caps (active discretionary policy provides the intervention). The Old Testament in Deuteronomy (23:19-20), and the Qur'an (30:39), both discuss the benefits of using interest caps. An in-depth analysis of the religious texts opinions on interest rates is beyond the scope of this paper, though very quickly: the Old Testament suggests only charging interest from strangers, and the Qur'an suggests charging no interest, though pursuing trading amongst the wealthy.

IV.A.C. Profit Allocation Scheme

The argument may be made that the financial institutions must make money to survive if they are independent, or even if they are government controlled, and that is true. Yet, the optimal profit structure would involve the central bank retaining all profits of the intrinsically worthless mechanism it created beyond a certain acceptable ceiling. Simply put, the bank which prints the make-believe money should be the one retaining all excessive profits made purely on the fake money itself. This is similar to what some central banks do today when they remit money to the Treasury, only they do not retain all excessive profits from all banking activities in their economy. Profit redirection and allocation between the financial intermediaries and the central bank is an empirical analysis beyond the scope of this review. On another note, the financial intermediaries may be either independent or government owned, in which case the profit redirection scheme must be modified accordingly. Overcompensation in any one industry creates a double strain on the progress of the society, as now creative people feel a need to gravitate towards a specific industry where compensation is much more disproportionate, as is the case with the financial services industry today. Bankers are no smarter or more important than other members of society, yet they get compensated much higher in many instances due to the ambiguous nature of the impacts of financial manipulation. Elimination of excessive profits would reduce the abilities of creative individuals to manipulate the system. The majority of people will always take an advantage if it is offered to them, and the financial services industry is no different. Just because something is an option, doesn't mean you are supposed to do it. Asbestos is an option to use for insulation, though would that really be a good idea? Financially engineered innovations are just the same, and due to the theoretical basis of capitalism in a computerised fiat monetary economy, they seem to make sense to pursue.

IV.B Intervention

Active discretionary monetary stabilisation tools can be considered intervention per *equation (4)*. Intervention can be either standard or exceptional, and accordingly, the level of initial regulation should determine the amount of both routine and extraordinary intervention needed. When standard, intervention will usually be in the form of the traditional active monetary stabilisation policy techniques of: open market operations, reserve ratios, and the discount rate; and when exceptional, intervention will usually be in the form of extreme intervention towards specific entities. Zaman (2008) suggests that the government needs to be prepared for quick reactions to any new situation, which means that in addition to the implementation of the correct regulatory rules, what is equally as important is the speed of discretionary intervention by the government. The intervention dilemma is less theoretical in nature than is the regulation question, and thus empirical analysis can be utilised to measure the effects of different interventionary measures possibly on a purer basis, albeit still through a theoretical construct. What this means is that the most commonly used active monetary stabilisation policy tools are more universally accepted than are the theoretically plausible passive rules. This is another argument for stringent regulation, as oftentimes it is difficult to realise or appreciate the dangers of reckless financial policies until mass intervention is needed to maintain the primary function of the financial intermediaries of facilitating funds transfers to businesses to grow the economy.

V. Business of Government

Referring to *equation (1),* the second primary undertaking (and third action) regarding the role of the government in the financial markets concerns the business of government. The government will need to utilise the capital markets from time to time in order to ensure infrastructure is properly maintained, when emergencies arise, and possibly for special programmes. Further, this involvement can be directly measured in both the domestic and foreign stock exchanges--*equation (5)*. Domestic exchanges can be analysed for their government's activity in them; however, this is neither uncommon nor improper. What raises more questions about the government's proper utilisation of the financial markets for its business needs, though, is when foreign stock exchanges are being used. There are several reasons why foreign stock exchanges may be used, though there are also two fundamental reasons why the government must use extreme caution in their business uses of both the domestic and foreign financial markets.

As suggested in hypothesis four, some countries may need to use foreign stock exchanges because their country's financial markets are unstable, though those with strong financial markets theoretically should not need to. Other reasons to utilise foreign capital markets include: better prices, cultural and political similarities, geographical proximity, and for stealth. What this means is that, theoretically speaking, government entities from the strong American markets should not need to utilise stock markets in Europe, European governments should not need to use each other as they all are strong, and some poorer governments around the world might be best suited to utilise the historically stronger North American and European financial markets. Cultural, political, and geographical similarities are important as well, as it is theoretically more legitimate to list onto a foreign exchange which is more culturally and politically similar and is closer in proximity to the home regime. This suggests that it is more legitimate for European countries to be cross-listing on each other's exchanges, and less so for a government to be utilising overseas exchanges for their financing needs. That said, when the overseas market has cultural and political similarities, there may still be positive benefits that may accrue from the foreign listing.

There are also two fundamental reasons why the financial markets should be used with discretion. Firstly, in terms of the fundamental nature of the financial markets, they are the backbone of a society, and thus the government must be more careful in their dealings with the financial industry than with any other industry. As the government directly regulates the financial markets, they must be very discretionary as to the amount and timing of their involvement in the financial markets. The issue of government involvement really goes for any industry, as the government must not mix political motives with business practises. Specifically in terms of the financial markets, how the government utilises the financial markets not only affects particular relationships with individual financial intermediaries, yet it also can affect the general stability of the society more so than government involvement in other industries does. For example, using one buyer for automobile needs could lead to preferential treatment with that buyer; however, that would likely not bring down the government and the country. Conversely, misbehaviour in the financial markets can mortgage the future of the government much easier due to the contagion issue arising from a computerised fiat monetary economy.

From a second fundamental standpoint, and discussed in section 1.2, involvement in the financial markets is also much harder to distance oneself from. Business contracts for most industries can be cancelled rather easily, or bought out; however, it is more difficult to just buy out debt contracts or stock market involvement. Even more so as the financial products become progressively complicated, it becomes increasingly difficult to wind down someone's involvement. For example, to cancel a purchase contract for a specific good, the process is rather straightforward. There may be minor legal differences between regions and industries, though the basic process is the same. With a product such as a credit-swap or a securitised loan, it can become nearly impossible to correctly unwind the contracts and liability when one needs to distance oneself from that financial intermediary. Especially as financial markets become more globally integrated and as much of the financial innovation is completely computerised in nature, it becomes increasingly difficult to identify where liability really lies and to know what exactly is at stake. Thus, for a government, which must always be able to identify a clean division from any part of society in order to avoid preferential treatment and to avoid serious contagion consequences resulting from being too leveraged in any one area, overuse of the financial markets in an increasingly computerised fiat monetary society is undesirable.

VI. Results

The sample includes the foreign government entities listed on the major international stock exchanges, as suggested by the World Federation of Exchanges. This includes all national governments, states, provinces, regions, municipalities, and cities. Cross-listed central banks, stock exchanges, and supranational organisations have also been included, though utilities and airports have not. Government-sponsored financial institutions have also been included, though this is the area where there may be some debate, as oftentimes it is disputable as to what constitutes a government-sponsored entity. The author is also not European, and as such, he may have missed some of the institutions in Europe that a European would have more readily identified. The data was collected via careful analysis of the international stock exchanges, e-mail correspondence with the exchanges and supranational organisations, proprietary data listings, and Google searches. An analysis of the American governments' financial market activity is presented in accordance with the author's perspectives on the theoretical role of the government in the financial markets. As such, other researchers may have different opinions regarding the American markets, as well as researchers native to the other regions in the world may be better suited to comment on the state of their countries' actions in the financial markets.

As shown in *Table VII.*, the preferred financial markets for foreign governments are: Frankfurt, Luxembourg, London, and Switzerland. Italy, Australia, Mexico, the EuroNext, and the NYSE all see activity as well, though not on nearly the same level as the primary four government exchanges. No other international stock exchanges have foreign government activity, though some of them trade over-the-counter for debt. As such, due to the lower transparency related with OTC trading, it is unlikely that there are a significant amount of foreign government entities traded OTC.

Hypothesis one and hypothesis two are best analysed from a general perspective, while hypothesis three and hypothesis four can be best explored through a regional perspective. Hypothesis one considers whether there are certain countries that are overstepping their financial boundaries with respect to the global economic system. Once again, considering the obscure nature of a computerised fiat monetary system, this question is best considered in terms of proportionate presence. In terms of the stock markets, there appear to be a disproportionate concentration of countries whose stock exchanges are utilised by foreign governments, all of which are in Europe, as described in the preceding paragraph. In terms of the dispersion of individual governments utilising these four primary exchanges, there are 627 total listings of governments onto foreign stock exchanges, and 5,943 individual issuances. Europe has around 50% of both listings and issuances, which seems appropriate considering the four primary exchanges are in Europe. The USA has the most issuances, while France has the most listings. For comparison, the USA has 18% of the total issuances, and 6% of the listings; France has 9% of the total issuances, and 9% of the listings. North America is the region where there is the greatest discrepancy between listings and total issuances, though this does not necessarily mean that North America is using a disproportionate share of the financial markets for their government financing needs.

The two primary international financial organisations are the World Bank and the International Monetary Fund, both departments of the United Nations, all three of which are headquartered in the USA. Possibly, all three of these organisations being in the same country creates a situation where there will be an imbalance in the global economy by default, and then that imbalance will be exacerbated if those two financial organisations are overly active in the financial markets. The International Bank for Reconstruction and Development and the International Finance

Corporation are both departments of the World Bank, and both have extensive activity in the foreign financial markets, being listed on five different exchanges with over 400 issuances. Though separate from the UN, the Inter-American Development Bank, with a mission to build the Caribbean and Latin America, is also headquartered in the USA and is very active in the international financial markets, as they are listed on six different markets with over 150 issuances. Once again, however, the USA is hands-down the largest economy, and thus hosts many international organisations.

Hypothesis two considers if there is a connection between the countries whose financial markets experienced the greatest shocks during the 2008 credit crisis, and those whose governments list onto foreign stock exchanges. The Bank of Greece and the Bank of England are both listed onto foreign stock exchanges, as is the USA Treasury, in some capacity. The USA Treasury's listings are more vague than Greece or England, though they all represent the primary financial institution of a major country listed onto a foreign stock exchange, in some form. In light of the recent financial issues experienced by these three countries, and many others, this is therefore an area that could suggest impending financial issues for the country listing onto foreign stock exchanges. There is not necessarily an issue in pursuing a specific listing, rather this could be an indication of a possible issue with the financial stabilisation philosophy of that country, as theoretically it can be argued that the home country's primary bank should not be listing onto foreign stock exchanges. The stock exchanges cross-listed onto foreign markets are the NYSE-EuroNext and London Stock Exchange, both of which are listed on the Deutchse Borse in Frankfurt. It is not uncommon for stock exchanges to be publicly traded, however, they still represent a major conduit through which foreign corporations enter the home country, and as such, the financing activities of stock exchanges arguably should be confined to the home economy.

Hypothesis three and hypothesis four are best evaluated through a regional viewpoint. Hypothesis three makes three assumptions: that governments will look to their domestic debt markets first for financing needs, that those domestic markets are efficient enough so as to render it unnecessary for the government to feel as if they would be safer utilising foreign markets, and that a domestic equity listing is preferred to a foreign equity listing, when need be. Hypothesis four, which is also a primary theoretical assumption of the business of government, proposes that the reasons why governments utilise foreign stock markets are for: better prices, more stability in the foreign market, cultural and political similarities, geographical proximity, and for stealth.

VI.A Africa

The preferred foreign stock exchanges for African governments in order are: Frankfurt, Luxembourg, London, the EuroNext, and Switzerland. African countries do not have any foreign governments listed on their stock exchanges. The African countries seem to prefer using foreign stock exchanges for their debt needs because their markets may not be as stable, though they do not have government entities listed onto foreign stock exchanges for equity purposes. The most likely reasons African countries utilise the foreign stock markets for their government financing needs are for better prices and to appreciate the increased stability of the foreign markets. Stealth is likely not as reasonable an explanation due to the great difference in stability between the African and European financial markets. Some people may assume that Africa is not as developed as other regions, yet the results uncovered in this study suggest otherwise, and that Africa actually has characteristics of a developed financial policy system. Clearly the African governments have done an excellent job of not over-extending themselves into other nations, and of maintaining a safe distance from the contagion effects sometimes resulting from financial market integration. There are positive welfare effects that can accrue from financial market integration as well, though the contagion consequences are usually more powerful than the welfare gains, and thus the welfare gains should be carefully weighed. In a fiat monetary economy where the currency mechanism is intrinsically worthless, it is always most wise to monitor your own financial markets with a domestic intent first and foremost, which Africa has traditionally done better than most other regions. *Table II.* shows the African governments' proportional utilisation of the global markets.

Table II. African Governments' Proportional Utilisation of the Global Markets

		Listed	Total	*Region Totals*		%	%	*Region Totals*	
		Entities	Issues	Entities	Issues	Entities	Issues	Entities	Issues
Africa	**Algeria**	1	1			0.0016	0.0002		
	DR Congo	2	2			0.0032	0.0003		
	Egypt	4	5			0.0064	0.0008		
	Gabon	1	2			0.0016	0.0003		
	Ghana	2	3			0.0032	0.0005		
	Ivory Coast	5	46			0.0080	0.0077		
	Morocco	2	2			0.0032	0.0003		
	R Congo	1	1			0.0016	0.0002		
	Senegal	2	2			0.0032	0.0003		
	Seychelles	1	1			0.0016	0.0002		
	South Africa	6	44			0.0096	0.0074		
	Tunisia	1	4	**28**	**113**	0.0016	0.0007	**0.0447**	**0.0190**

This table shows the African governments' proportional utilisation of the financial markets.

VI.B Europe

The preferred foreign stock exchanges for European governments in order are: Frankfurt, Luxembourg, London, Switzerland, EuroNext, Italy, and Australia. Europe is by far the preferred destination for foreign governments listing onto stock exchanges, with Frankfurt, Luxembourg, London, Switzerland, Italy, and the EuroNext all catering to foreign governments' financing needs. European countries have very stable financial markets able to sustain their governments' financing requirements, though they also make extensive use of the other international stock exchanges for their government debt needs; European governments do not have any foreign government equity listings. Plausible reasons why the European governments utilise other world stock exchanges, even though their domestic markets are well developed, is that they have cultural, political, and geographical similarities, as the primary four markets for foreign government debt are in Europe. The European governments could also be using foreign markets for better prices, though stealth does not seem to be a reason considering the intimacy of the European continent. Although the reasons may not be completely clear as to why, the facts remain that the European countries are very active in utilising foreign stock exchanges to procure government financing needs, and that the European stock exchanges are the most preferred for foreign governments' financing needs around the world. An in-depth analysis of the European entities and capital markets may be best performed by someone more familiar with this region, as this author is more familiar with the American region. *Table III.* shows the European governments' proportional utilisation of the global markets.

Table III. European Governments' Proportional Utilisation of the Global Markets

		Listed Entities	Total Issues	*Region Totals* Entities	*Region Totals* Issues	% Entities	% Issues	*Region Totals* Entities	*Region Totals* Issues
Europe	**Albania**	1	1			0.0016	0.0002		
	Austria	9	183			0.0144	0.0308		
	Belgium	7	67			0.0112	0.0113		
	Bosnia-Herz	1	2			0.0016	0.0003		
	Bulgaria	3	5			0.0048	0.0008		
	Canary Islands	1	4			0.0016	0.0007		
	Croatia	4	20			0.0064	0.0034		
	Cyprus	4	11			0.0064	0.0019		
	Czechoslovakia	12	40			0.0191	0.0067		
	Denmark	8	45			0.0128	0.0076		
	Finland	9	85			0.0144	0.0143		
	France	57	541			0.0909	0.0910		
	Georgia	2	2			0.0032	0.0003		
	Germany	23	206			0.0367	0.0347		
	Greece	9	104			0.0144	0.0175		
	Hungary	4	81			0.0064	0.0136		
	Iceland	4	10			0.0064	0.0017		
	Ireland	4	32			0.0064	0.0054		
	Isle of Man	1	2			0.0016	0.0003		
	Italy	33	145			0.0526	0.0244		
	Latvia	3	6			0.0048	0.0010		
	Lithuania	3	18			0.0048	0.0030		
	Luxembourg	13	619			0.0207	0.1042		
	Macedonia	2	4			0.0032	0.0007		
	Netherlands	13	297			0.0207	0.0500		
	Norway	5	39			0.0080	0.0066		
	Poland	5	69			0.0080	0.0116		
	Portugal	6	30			0.0096	0.0050		
	Romania	4	8			0.0064	0.0013		
	Serbia	1	1			0.0016	0.0002		
	Slovakia	5	22			0.0080	0.0037		
	Slovenia	2	6			0.0032	0.0010		
	Spain	25	267			0.0399	0.0449		
	Sweden	20	174			0.0319	0.0293		
	Switzerland	31	203			0.0494	0.0342		
	UK	7	44			0.0112	0.0074		
	Ukraine	4	13			0.0064	0.0022		
	Yugoslavia	1	2	**346**	**3408**	0.0016	0.0003	**0.5518**	**0.5734**

This table shows the European governments' proportional utilisation of the financial markets.

VI.C Asia

The preferred foreign stock exchanges for Asian governments in order are: Frankfurt, Luxembourg, London, Switzerland, the EuroNext, Australia, and the NYSE. Asian countries do not have any foreign governments listed on their stock exchanges. Asia's governmental capital market activity is very similar to Africa's, as they are neither very extended nor do they allow foreign governments to utilise their stock exchanges, though their domestic governments do make extensive use of their quite stable home financial markets for debt needs; there are not any Asian government entities listed on foreign stock exchanges for equity purposes. In attempting to explain the business rationale for the Asian governments utilising international stock exchanges for government debt needs, there are little cultural or geographical similarities, and fewer political parallels. Stealth is likely not a reason, as there are only a few total Asian government foreign stock exchange listings. A more likely explanation for the Asian governments' activity on the international stock exchanges is because they are offered better prices at the time, and possibly for political bonding purposes. *Table IV.* shows the Asian governments' proportional utilisation of the global markets.

Table IV. Asian Governments' Proportional Utilisation of the Global Markets

		Listed Entities	Total Issues	*Region Totals* Entities	*Region Totals* Issues	% Entities	% Issues	*Region Totals* Entities	*Region Totals* Issues
Asia	**China**	5	20			0.0080	0.0034		
	Hong Kong	1	1			0.0016	0.0002		
	Israel	5	14			0.0080	0.0024		
	Japan	9	45			0.0144	0.0076		
	Jordan	1	1			0.0016	0.0002		
	Kazakhstan	2	4			0.0032	0.0007		
	Korea	7	29			0.0112	0.0049		
	Lebanon	2	32			0.0032	0.0054		
	Malaysia	4	4			0.0064	0.0007		
	Pakistan	1	3			0.0016	0.0005		
	Philippines	7	155			0.0112	0.0261		
	Qatar	2	12			0.0032	0.0020		
	Russia	5	13			0.0080	0.0022		
	Turkey	3	53			0.0048	0.0089		
	UAE	5	12			0.0080	0.0020		
	Vietnam	2	5	**61**	**403**	0.0032	0.0008	**0.0973**	**0.0678**

This table shows the Asian governments' proportional utilisation of the financial markets.

VI.D Oceania

The preferred foreign stock exchanges for Oceania governments in order are: Frankfurt, London, Luxembourg, Switzerland, and the NYSE. The Australian Stock Exchange has the most foreign government listings of any country in Oceania, at seven. Due primarily to the strong Australian presence, Oceania seems to be where governments in Asia could look towards as a financing possibility in the future. The Oceanic financial markets are developed enough to be able to cater to their governments' debt needs, and they do so; Oceania also does not have any government entities listed for equity purposes on foreign stock exchanges. The most likely reasons why the governments from Oceania might utilise foreign stock exchanges are because of cultural and political similarities, and possibly because of better prices. Geographically, Oceania is quite distant from Europe, and stealth does not seem to be a relevant reason because there are so few overall listings. *Table V.* shows the Oceanic governments' proportional utilisation of the global markets.

Table V. Oceanic Governments' Proportional Utilisation of the Global Markets

		Listed	Total	*Region Totals*		%	%	*Region Totals*	
		Entities	Issues	Entities	Issues	Entities	Issues	Entities	Issues
Oceania	**Australia**	13	44			0.0207	0.0074		
	Fiji	1	1			0.0016	0.0002		
	Indonesia	2	14			0.0032	0.0024		
	New Zealand	5	11			0.0080	0.0019		
	Singapore	1	2			0.0016	0.0003		
	Sri Lanka	1	1	**23**	**73**	0.0016	0.0002	**0.0367**	**0.0123**

This table shows the Oceanic governments' proportional utilisation of the financial markets.

VI.E Americas

The two regions where the most analysis can be extracted are the Americas and Europe. As this author is most familiar with the Americas, there is a greater confidence that the government institutions from the Americas have been fully collected, and that they can be analysed most effectively in this paper. As such, an in-depth analysis of the European entities may be best performed by someone more familiar with that region. The preferred foreign stock exchanges for North American governments in order are: Luxembourg, Frankfurt, Switzerland, London, Mexico, Australia, and Italy. The preferred foreign stock exchanges for South American governments in order are: Frankfurt, Luxembourg, London, Switzerland, and the EuroNext. The preferred foreign stock exchanges for Caribbean governments in order are: Luxembourg, Frankfurt, London, and Switzerland. There are only five total foreign government listings on the American exchanges: two on the USA NYSE and three on the Mexican BMV.

Canada and the USA would be assumed to have the most developed financial markets in the Americas, and thus their governments may not need to utilise foreign countries' capital markets. The rest of the countries in the Americas can be assumed to be not as developed as Canada or the USA, and consequently their governments may need to utilise foreign stock exchanges in order to find the best prices and stability for their funding needs. Mexico, the Caribbean, and South America do have some cultural and political similarities with Europe, though no American country has any geographical parallels with Europe; stealth likely is not a factor in these countries' use of foreign stock exchanges for government financing needs, due to their low amount of total listings. Canada and the USA pursue many more foreign government listings than the other American countries, which could be because of better prices offered at the time, or for cultural, political, or stealth reasons. The USA, however, is the only country in the Americas that has a government entity listed for equity purposes on a foreign stock exchange.

Freddie Mac listed for equity on the Mexican BMV in 2008, at the height of the credit crisis (Freddie Mac, Fannie Mae, and several other USA government mortgage institutions are also listed on the Frankfurt and Luxembourg stock exchanges for debt). As discussed in hypothesis three, when governments list onto stock exchanges for equity purposes, a double incident of ownership is created, which is like making money for selling the same thing twice, as the citizens already own the government. A likely explanation, however, is that this was a way to raise money when they were in a dire financial situation, considering their financial needs at the time. By going to the Mexican exchange they were able to keep quiet where they were getting the funds to perhaps cover some of their other issues, all at the same time they were getting money from the USA taxpayers to bail them out. Perhaps this sort of activity acts as a band-aid for the current, while creating more issues for the future.

The USA's Treasury listings in Mexico are perhaps more puzzling. The USA Treasury listed onto the Mexican Stock Exchange in 2006, which was right before some USA financial institutions began failing at the start of the 2008 credit crisis. Perhaps this was not the best route to take in order to ensure stable financial markets in the USA by the USA Treasury, which is their primary job in conjunction with the Federal Reserve of the USA, or at least the pure theoretics of the government's activity in the financial markets suggests so. It is possible, however, that the USA Treasury's listings in Mexico are little more than the Mexican government's way of keeping track of their supply of USA government debt. To put this central bank listing in perspective, the USA Treasury is also listed on the Frankfurt stock exchange, the Bank of Greece is listed on the London and Frankfurt stock exchanges, the Bank of England is listed on the Frankfurt and Swixx stock exchanges, and the Central Bank of Tunisia is listed on the Frankfurt stock exchange.

It is not uncommon for governments to conduct business on stock exchanges, such as issuing debt, or municipal bonds. For example, the provinces of Quebec and Ontario are both listed on the Australian Stock Exchange for debt purposes, as well as many others. One must assume, however, that a government province, territory, or state, is quite different from a government agency. The provincial governments must maintain infrastructure and basic community services, which have limited if any financial repayment possibilities. Some government agencies behave in this manner as well, however, Freddie Mac does not. Freddie Mac is a government agent with a stated purpose of helping USA citizens buy homes through administering loans. This means they manage a loan portfolio, which consequently means that they both receive money and pay out money, thereby indicating that there should be a reasonable, moderate balance between the two payment mechanisms. Further, because of their existence as a government entity, they must be more restrained than a corporate financial intermediary, and simply cannot take on as many risks, which could put them in a needy financial position. A corporation could issue debt if they were in a precarious financial position, as could a government entity; however, an agent of the government ideally should not be doing so. On a separate note for a different forum, financial intermediaries and government entities should be independent to a degree.

As such, the presence of Freddie Mac on the Mexican Stock Exchange indicates that their focus could possibly be on some sort of profits, and the resulting bonuses that accrue to management, or that they found themselves in a very precarious financial situation. Freddie Mac was founded by the USA Congress as a Government Sponsored Enterprise (GSE), and operates with a CEO. Freddie Mac's common stock is registered on the NYSE as well, and perhaps this is an issue for an entirely separate paper; however, to this author, this sort of capitalism raises serious domestic and foreign stability concerns. As it is, Freddie Mac has currently created a triple incident of ownership for USA citizens; by listing for equity on the NYSE they created a double incident of ownership, and when Freddie Mac listed on the BMV they created a triple incident of ownership. Even governments need to make money and to be somewhat business like in nature in order to provide for their citizens, though, there is simply a lower amount of risk the government can acceptably take without putting their citizens and globally integrated trading partners in danger. And to that end, Freddie Mac was a USA federal bailout recipient in 2008.

Canada has a relatively high amount of foreign listings by their provinces onto foreign stock exchanges, more so than any other American country and as much as some of the European countries. Canada also has mortgage-type governmental financial institutions listed onto foreign stock exchanges, though again, the author is not Canadian and so he cannot vouch for the

Canadian government's responsibilities to their citizens. Again, there is no prescribed dictate for how a governmental entity should utilise the financial markets, just personal opinions which can be related to historical performance trends. As such, as a U.S. citizen, this author personally does not feel that Freddie Mac listing onto foreign stock exchanges helps USA citizens buy homes, and believes that government agencies such as Freddie Mac should only use domestic debt programmes in the financial markets, and only in extreme circumstances. Financial shenanigans can be defined as: 'branching out into markets one has no legitimate business in'; when this happens immediate profits are made for a select few at the expense of the long-term stability of the majority when the economic forces demanding proper motive for economic transactions appear to balance out the distortion. This is what is hoped to be avoided, especially by the governments which are supposed to be setting the example. As such, perhaps there currently are instances of financial shenanigans by governments in their use of the financial markets. *Table VI.* shows the American governments' proportional utilisation of the global markets.

Table VI. American Governments' Proportional Utilisation of the Global Markets

		Listed Entities	Total Issues	*Region Totals* Entities	*Region Totals* Issues	% Entities	% Issues	*Region Totals* Entities	*Region Totals* Issues
N.Amer	**Canada**	54	361			0.0861	0.0607		
	Mexico	3	62			0.0048	0.0104		
	USA	37	1063	**94**	**1486**	0.0590	0.1789	**0.1499**	**0.2500**
S.Amer	**Argentina**	12	105			0.0191	0.0177		
	Belize	2	4			0.0032	0.0007		
	Brazil	12	87			0.0191	0.0146		
	Chile	4	8			0.0064	0.0013		
	Colombia	4	44			0.0064	0.0074		
	Ecuador	2	8			0.0032	0.0013		
	Guyana	1	2			0.0016	0.0003		
	Peru	5	27			0.0080	0.0045		
	Uruguay	4	41			0.0064	0.0069		
	Venezuela	4	47	**50**	**373**	0.0064	0.0079	**0.0797**	**0.0628**
Caribb	**Aruba**	1	1			0.0016	0.0002		
	Bahamas	2	4			0.0032	0.0007		
	Barbados	3	6			0.0048	0.0010		
	Cayman Is.	3	3			0.0048	0.0005		
	Costa Rica	2	10			0.0032	0.0017		
	Cuba	1	5			0.0016	0.0008		
	Dominican Rep	1	4			0.0016	0.0007		
	El Salvador	2	7			0.0032	0.0012		
	Guatemala	2	4			0.0032	0.0007		
	Jamaica	2	16			0.0032	0.0027		
	Panama	3	23			0.0048	0.0039		
	St. Vincent Gren	1	1			0.0016	0.0002		
	Trinidad Tobago	2	3	**25**	**87**	0.0032	0.0005	**0.0399**	**0.0357**

This table shows the American governments' proportional utilisation of the financial markets.

VII. Closing Thoughts

To sum up, the primary purpose of this paper is to outline a theoretical framework of a prescribed role for the government in the financial markets, which is comprised of three distinct functions: regulation, intervention, and personal use *(equation 1).* Regulation in economics is a political process, whereby the government aligns its political interests with its economic needs; for a fiat monetary economy this first involves delineating the role of the financial intermediary as a simple transferor of funds between savers and borrowers, and also as an entity which can provide risk hedging activities for business needs *(equation 2).* After the government has ensured the proper role of the financial intermediary in the society, the effect of interest rate caps for a fiat monetary economy can be empirically analysed, as can the profit allocation scheme for such a simplified financial intermediary system *(equation 3).* Intervention, both normal and extreme, can be best empirically analysed through the use of the active monetary stabilisation policy tools via the economic indicators on which they are based, such as the inflation, exchange, and interest rates; extreme intervention is a complicated process and is quite often as unpredictable as the events which precede its need, though it often involves direct action towards specific institutions *(equation 4).* Further, the impact on the island economy pursuing the theoretical financial intermediary function in the global economy can be analysed in the vacuum of foreign economies pursuing both similar and dissimilar policies. Personal utilisation of the financial markets by the government can be empirically analysed through inspection of the international stock markets *(equation 5),* which is the secondary purpose of this paper after the explanation of the theoretical framework for the role of the government in the financial markets.

A complementary study could look at the activity of governmental entities on the domestic exchanges for both debt and equity purposes, as well as analyse the movement of governments between foreign exchanges. Further, due to the nature of government interactions and disclosure by less transparent countries around the world, there could possibly be more current examples of governments on foreign exchanges, although this could truly be compared to finding the proverbial 'needle in the haystack.' In an ever increasingly technology driven society, it is becoming less intelligent for governments to be aggressive towards each other, either economically or militarily. The presence of rich countries and poor countries, however, creates a conundrum whereby a poor country will want to grab whenever they can to rise, and the rich country will want to grab to maintain; we even see this type of activity by governments in the financial markets.

It would be idyllic to think that everyone can act appropriately when offered large sums of money, though monetary history just suggests otherwise. As such, political interests and youthful enthusiasm from the new generations in their abilities and restraint will suggest that the financial markets will continue to be characterised by speculative behaviour, interest rate spreads, and government misuse at times. Nonetheless, recognition of the need for compromise on these financial issues can still be helpful in attempting to minimise corruption and inequality resulting from financial market inefficiency from an attempt to be more effective at 'making' money. Money can be 'made' quite quickly and effectively in a computerised fiat monetary economy. Nevertheless, more effective does not necessarily mean more efficient, and efficiency is what is most important for stability in economic growth and minimisation of social dissent.

The government can best suit its citizens by remaining as neutral as possible in their personal dealings with the financial markets, yet very strong in their regulation and supervision so as to constrain the inherent greed of money. As anyone can be influenced by greed, the government is no different, and is just as vulnerable to falling into that trap as other members of society. Even so, the government can maintain a better society by regulating the financial markets very strictly, and keeping a safe distance themselves in their personal use of the capital markets.

Table VII. Preferred Foreign Markets for Governments' Listing Needs

		1st	2nd	3rd	4th	5th	6th
N.Amer	**Canada**	Swixx	Frankfurt	Luxembourg	London	Australia	Mexico
	Mexico	Luxembourg	Frankfurt	Swixx			
	USA	Luxembourg	Frankfurt	Swixx	Mexico	London	Australia/Italy
S.Amer	**Argentina**	Luxembourg	Frankfurt	Swixx	EuroNext	London	
	Belize	Frankfurt	Luxembourg				
	Brazil	London	Frankfurt	Luxembourg	Swixx		
	Chile	Frankfurt	Swixx	Luxembourg			
	Colombia	Frankfurt	Luxembourg	Swixx			
	Ecuador	Luxembourg	Frankfurt				
	Guyana	London					
	Peru	London	Luxembourg	Frankfurt	Swixx		
	Uruguay	Luxembourg	Frankfurt	London	Swixx		
	Venezuela	Frankfurt	Luxembourg	Swixx			
Europe	**Albania**	Luxembourg					
	Austria	Frankfurt	Swixx	Luxembourg	EuroNext	Italy	
	Belgium	Frankfurt	Luxembourg	Swixx			
	Bosnia-Herz	Luxembourg					
	Bulgaria	Frankfurt	Luxembourg	Swixx			
	Canary Islands	Frankfurt					
	Croatia	Frankfurt	Luxembourg	Swixx			
	Cyprus	Frankfurt	London	Swixx			
	Czechoslovakia	Frankfurt	Luxembourg	Swixx	London		
	Denmark	Swixx	Frankfurt	Luxembourg	London		
	Finland	Swixx	Frankfurt	Luxembourg	London	Australia	EuroNext
	France	Frankfurt	Luxembourg	Swixx	London	Australia	Italy
	Georgia	London	Frankfurt				
	Germany	Swixx	Luxembourg	London	Italy	Australia	
	Greece	Frankfurt	London	Luxembourg	Swixx	Italy	
	Hungary	Frankfurt	Swixx	Luxembourg	London		
	Iceland	Swixx	Frankfurt	London	Luxembourg		
	Ireland	Frankfurt	Swixx	London			
	Isle of Man	Frankfurt					
	Italy	Luxembourg	London	Swixx	Frankfurt	EuroNext	
	Latvia	Frankfurt	Luxembourg	Swixx			
	Lithuania	Luxembourg	Frankfurt	Swixx			
	Luxembourg	Swixx	London	Frankfurt	Italy		
	Macedonia	London	Frankfurt				
	Netherlands	Frankfurt	Swixx	London	Australia		
	Norway	Frankfurt	Swixx				
	Poland	Frankfurt	Luxembourg	Swixx			
	Portugal	Luxembourg	Frankfurt	London			
	Romania	Luxembourg	Frankfurt				
	Serbia	Luxembourg					
	Slovakia	Luxembourg	Frankfurt	Swixx	London		
	Slovenia	Luxembourg	Frankfurt				
	Spain	Frankfurt	Swixx	Luxembourg	London		
	Sweden	Swixx	Frankfurt	London	Luxembourg	Australia	
	Switzerland	Frankfurt	London				
	UK	Frankfurt	Swixx	EuroNext			
	Ukraine	Luxembourg	Frankfurt	Swixx			

This table shows Preferred Foreign Markets for Governments' Listing Needs.

Table VII. Preferred Foreign Markets for Governments' Listing Needs

		1st	2nd	3rd	4th	5th	6th
Caribb	**Aruba**	Luxembourg					
	Bahamas	Luxembourg	Frankfurt				
	Barbados	Luxembourg	London	Frankfurt			
	Cayman Is.	Frankfurt	London				
	Costa Rica	Luxembourg	Frankfurt				
	Cuba	London					
	Dominican Rep	Luxembourg					
	El Salvador	Luxembourg	Frankfurt				
	Guatemala	Luxembourg	Frankfurt				
	Jamaica	Frankfurt	Luxembourg				
	Panama	Luxembourg	Swixx	Frankfurt			
	St. Vincent Gren	Luxembourg					
	Trinidad Tobago	Luxembourg	London				
Asia	**China**	Frankfurt	EuroNext	Luxembourg	Swixx		
	Hong Kong	Frankfurt					
	Israel	Luxembourg	Swixx	Frankfurt	London	NYSE	
	Japan	London	Frankfurt	Swixx			
	Jordan	London					
	Kazakhstan	Frankfurt					
	Korea	Frankfurt	Swixx	Luxembourg			
	Lebanon	Luxembourg	Frankfurt				
	Malaysia	Frankfurt	London	Luxembourg	Swixx		
	Pakistan	Luxembourg					
	Philippines	Luxembourg	Frankfurt	Swixx	Australia		
	Qatar	Frankfurt	Luxembourg				
	Russia	Luxembourg	Swixx	Frankfurt			
	Turkey	Frankfurt	Luxembourg	Swixx			
	UAE	Frankfurt	London				
	Vietnam	Luxembourg	Frankfurt				
Oceania	**Australia**	Frankfurt	London	Luxembourg	Swixx		
	Fiji	Frankfurt					
	Indonesia	Frankfurt	Luxembourg				
	New Zealand	London	Frankfurt	Luxembourg	Swixx	NYSE	
	Singapore	London					
	Sri Lanka	Frankfurt					
Africa	**Algeria**	EuroNext					
	DR Congo	Frankfurt	EuroNext				
	Egypt	Frankfurt	Luxembourg	Swixx			
	Gabon	London					
	Ghana	London	Frankfurt				
	Ivory Coast	Luxembourg	Frankfurt	Swixx	London		
	Morocco	Luxembourg	Frankfurt				
	R Congo	Luxembourg					
	Senegal	Frankfurt	Luxembourg				
	Seychelles	London					
	South Africa	Frankfurt	Swixx	Luxembourg			

This table shows Preferred Foreign Markets for Governments' Listing Needs.

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Appendix I. Governments Listed in Foreign Countries 2010

Country	Government	Stock Exchange	Number of Issues
Albania	Republic of Albania	Luxembourg	2
Algeria	Republic of Algeria	EuroNext	3
Argentina	City of Buenos Aires	Luxembourg	2
Argentina	City of Sante Fe	London	2
Argentina	Province of Buenos Aires	Frankfurt	11
Argentina	Province of Buenos Aires	Luxembourg	9
Argentina	Province of Buenos Aires	Swixx	1
Argentina	Province of Mendoza	Frankfurt	1
Argentina	Province of Mendoza	Luxembourg	1
Argentina	Province of Neuquen	Luxembourg	1
Argentina	Republic of Argentina	Frankfurt	35
Argentina	Republic of Argentina	EuroNext	14
Argentina	Republic of Argentina	Luxembourg	27
Argentina	Republic of Argentina	Swixx	1
Aruba	Government of Aruba	Luxembourg	3
Australia	New South Wales Treasury	Swixx	3
Australia	New South Wales Treausry	Frankfurt	6
Australia	Province of New South Wales	London	8
Australia	Province of Victoria	London	1
Australia	Province of Victoria-Electric Company	London	1
Australia	Queensland Treasury	Frankfurt	10
Australia	Republic of Australia	Frankfurt	6
Australia	Republic of Australia	Swixx	1
Australia	South Australian Gov. Financing Authority	Frankfurt	1
Australia	South Australian Gov. Financing Authority	Luxembourg	1
Australia	State Electricity Commission of Victoria	Frankfurt	1
Australia	Treasury Corporation of Victoria	Frankfurt	4
Australia	Victorian Public Authorities Finance	Luxembourg	1
Austria	ASFINAG	Frankfurt	9
Austria	ASFINAG	Swixx	4
Austria	Niederösterreich, Land	Frankfurt	1
Austria	Pfandbriefstelle Landes-Hypothekenbanke	Frankfurt	12
Austria	Republic of Austria	Frankfurt	78
Austria	Republic of Austria	EuroNext	18
Austria	Republic of Austria	Luxembourg	29
Austria	Republic of Austria	Swixx	24
Austria	Republic of Austria	Italian	8
Bahamas	Commonwealth of the Bahamas	Luxembourg	3
Bahamas	Commonwealth of the Bahamas	Frankfurt	1
Barbados	Government of Barbados	Frankfurt	1
Barbados	Government of Barbados	Luxembourg	3
Barbados	Government of Barbados	London	2
Belgian Congo	Belgian Congo	EuroNext	1
Belgium	Belgium Ministry of Finance	Luxembourg	11
Belgium	Communaute Francaise de Belgium	Luxembourg	5
Belgium	Flanders Region	Frankfurt	4
Belgium	Kingdom of Belgium	Frankfurt	27
Belgium	Kingdom of Belgium	Luxembourg	5
Belgium	Société Nationale des Chemins de Fer Belges	Frankfurt	2
Belgium	Kingdom of Belgium	Swixx	13

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Country	Government	Stock Exchange	Number of Issues
Belize	Government of Belize	Frankfurt	2
Belize	Government of Belize	Luxembourg	2
Bosnia-Herzegovina	Republic of Bosnia-Herzegovina	Luxembourg	2
Brasil	National Bank of Economy & Social Development	Frankfurt	3
Brasil	Republic of Brazil	Frankfurt	28
Brazil	State of Guanbara, Rio de Janeiro	London	1
Brazil	City of Nictheroy	London	1
Brazil	City of Pernambuco	London	1
Brazil	City of Santos	London	1
Brazil	Municipality of Pelotas	London	1
Brazil	Republic of Brazil	Luxembourg	28
Brazil	Republic of Brazil	Swixx	16
Brazil	State of Bahia	London	4
Brazil	State of Minias Gerias	London	1
Brazil	State of Rio de Janeiro	London	2
Bulgaria	Republic of Bulgaria	Frankfurt	2
Bulgaria	Republic of Bulgaria	Luxembourg	2
Bulgaria	Republic of Bulgaria	Swixx	1
Canada	Alberta Cap Finance	Swixx	1
Canada	Canada Housing Trust	Frankfurt	11
Canada	Canada Mortgage and Housing Corporation	Luxembourg	4
Canada	Canada Mortgage and Housing Corporation	Swixx	3
Canada	City of Montreal	Frankfurt	1
Canada	City of Montreal	London	1
Canada	City of Montreal	Luxembourg	4
Canada	Export Development Bank Canada	London	16
Canada	Export Development Bank Canada	Luxembourg	10
Canada	Export Development Bank Canada	Swixx	11
Canada	Export Development Bank Canada	Frankfurt	14
Canada	Financement Quebec	Frankfurt	1
Canada	Hydro-Quebec	Frankfurt	5
Canada	Hydro-Quebec	London	4
Canada	Hydro-Quebec	Luxembourg	3
Canada	Province of Alberta	Swixx	1
Canada	Province of British Columbia	Frankfurt	6
Canada	Province of British Columbia	London	6
Canada	Province of British Columbia	Luxembourg	2
Canada	Province of British Columbia	Swixx	4
Canada	Province of Manitoba	Frankfurt	9
Canada	Province of Manitoba	London	3
Canada	Province of Manitoba	Luxembourg	2
Canada	Province of Manitoba	Swixx	7
Canada	Province of New Brunswick	Frankfurt	3
Canada	Province of New Brunswick	London	1
Canada	Province of New Brunswick	Luxembourg	2
Canada	Province of New Brunswick	Swixx	2
Canada	Province of New Foundland and Labrador	Luxembourg	2
Canada	Province of New Foundland and Labrador	Frankfurt	1
Canada	Province of Nova Scotia	Frankfurt	3
Canada	Province of Nova Scotia	London	2

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Country	Government	Stock Exchange	Number of Issues
Canada	Province of Nova Scotia	Luxembourg	2
Canada	Province of Ontario	Australia	1
Canada	Province of Ontario	Frankfurt	42
Canada	Province of Ontario	London	38
Canada	Province of Ontario	Luxembourg	6
Canada	Province of Ontario	Swixx	33
Canada	Province of Quebec	Australia	1
Canada	Province of Quebec	Frankfurt	28
Canada	Province of Quebec	London	19
Canada	Province of Quebec	Luxembourg	10
Canada	Province of Quebec	Mexico	1
Canada	Province of Quebec	Swixx	24
Canada	Province of Saskatchewan	Frankfurt	2
Canada	Province of Saskatchewan	London	1
Canada	Province of Saskatchewan	Swixx	2
Canada	Republic of Canada	Frankfurt	2
Canada	Republic of Canada	Luxembourg	2
Canada	Republic of Canada	Swixx	2
Canary Islands	Comunidad Autónoma de Canarias	Frankfurt	4
Cayman Islands	Brazil Development Bank	Frankfurt	1
Cayman Islands	Cayman Islands Government	London	1
Cayman Islands	Caymand Islands Exchange Funding	Frankfurt	1
Chile	Corporación Nacional del Cobre de Chile	Frankfurt	2
Chile	Republic of Chile	Frankfurt	2
Chile	Republic of Chile	Swixx	2
Chile	Republic of Chile	Luxembourg	2
China	China Development Bank	Frankfurt	1
China	People's Republic of China	EuroNext	11
China	People's Republic of China	Luxembourg	4
China	People's Republic of China	Swixx	1
China	People's Republic of China	Frankfurt	3
Colombia	Empresas Públicas de Medellín E.S.P.	Frankfurt	1
Colombia	Republic of Colombia	Frankfurt	15
Colombia	Republic of Colombia	Luxembourg	20
Colombia	Republic of Colombia	Swixx	8
Costa Rica	Republic of Costa Rica	Frankfurt	5
Costa Rica	Republic of Costa Rica	Luxembourg	5
Croatia	Croatian Bank Reconstruction Development	Frankfurt	5
Croatia	Republic of Croatia	Luxembourg	6
Croatia	Republic of Croatia	Swixx	2
Croatia	Republic of Croatia	Frankfurt	7
Cuba	Central Bank of Cuba	London	5
Cyprus	Bank of Cyprus	Frankfurt	2
Cyprus	Republic of Cyprus	Swixx	2
Cyprus	Republic of Cyprus	Frankfurt	4
Cyprus	Republic of Cyprus	London	3
Czechoslovakia	Ceská Exportní Banka	Frankfurt	2
Czechoslovakia	City of Brno	Luxembourg	1
Czechoslovakia	City of Ostrava	Frankfurt	1
Czechoslovakia	City of Ostrava	Luxembourg	1

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Country	Government	Stock Exchange	Number of Issues
Czechoslovakia	City of Prague	Luxembourg	1
Czechoslovakia	City of Prague	Swixx	1
Czechoslovakia	City of Prague	Frankfurt	1
Czechoslovakia	Republic of Czechoslovakia	Frankfurt	17
Czechoslovakia	Republic of Czechoslovakia	Luxembourg	5
Czechoslovakia	Republic of Czechoslovakia	Swixx	9
Czechoslovakia	Republic of Czechoslovakia	London	1
Denmark	City of Kopenhagen	Swixx	1
Denmark	Finance for Danish Industry	Swixx	1
Denmark	Kingdom of Denmark	Luxembourg	7
Denmark	Kingdom of Denmark	Swixx	12
Denmark	Kingdom of Denmark	Frankfurt	6
Denmark	Kingdom of Denmark	London	4
Denmark	KommuneKredit	Frankfurt	7
Denmark	KommuneKredit	Swixx	7
Dominican Republic	The Dominican Republic	Luxembourg	4
DR Congo	Democratic Republic of the Congo	Frankfurt	1
Ecuador	Republic of Ecuador	Frankfurt	2
Ecuador	Republic of Ecuador	Luxembourg	6
Egypt	African-Export Import Bank	Frankfurt	1
Egypt	Arab Republic of Egypt	Frankfurt	1
Egypt	Arab Republic of Egypt	Luxembourg	2
Egypt	Arab Republic of Egypt	Swixx	1
El Salvador	Republic of El Salvador	Frankfurt	1
El Salvador	Republic of El Salvador	Luxembourg	6
Fiji	Republic of Fiji	Frankfurt	1
Finland	Municipality	Swixx	7
Finland	Nordic Investment Bank	Frankfurt	34
Finland	Nordic Investment Bank	Swixx	3
Finland	Nordic Investment Bank	Luxembourg	11
Finland	Nordic Investment Bank	Australia	2
Finland	Republic of Finland	EuroNext	1
Finland	Republic of Finland	Frankfurt	12
Finland	Republic of Finland	Swixx	9
Finland	Republic of Finland	London	6
France	Autoroutes Paris-Rhin-Rhône	Frankfurt	1
France	C.R.H. Caisse de Refinancementl'Habitat S.A.	Frankfurt	11
France	CADES	Swixx	5
France	Caisse Centrale Crédit Immobilier de France	Frankfurt	9
France	Caisse des Dépôts et Consignations	Swixx	3
France	Caisse des Dépôts et Consignations	Frankfurt	5
France	Caisse Federale Credit Mutuel Nord Europe	Frankfurt	1
France	Caisse Nationale des Autoroutes	Frankfurt	11
France	CIF Euromortgage	Frankfurt	14
France	City of Cannes	Luxembourg	4
France	City of Lyon	Frankfurt	1
France	City of Marseille	Frankfurt	3
France	City of Paris	Swixx	4
France	City of Paris	Frankfurt	5
France	City of Paris	Luxembourg	1

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Country	Government	Stock Exchange	Number of Issues
France	Communaute Urbaine D'AlenÇon	Luxembourg	1
France	Communaute Urbaine D'Arras	Luxembourg	1
France	Communaute Urbaine De Bordeaux	Luxembourg	1
France	Communaute Urbaine De Brest	Luxembourg	1
France	Communaute Urbaine De Cherbourg	Luxembourg	1
France	Communaute Urbaine De Dunkerque	Luxembourg	1
France	Communaute Urbaine De Lille	Luxembourg	1
France	Communaute Urbaine De Lyon	Luxembourg	1
France	Communaute Urbaine De Marseille	Luxembourg	1
France	Communaute Urbaine De Nancy	Luxembourg	1
France	Communaute Urbaine De Nantes	Luxembourg	1
France	Communaute Urbaine De Strasbourg	Luxembourg	1
France	Communaute Urbaine Du Creusot	Luxembourg	1
France	Communaute Urbaine Du Mans	Luxembourg	1
France	Compagnie de Financement Foncier	Swixx	13
France	Compagnie de Financement Foncier	Frankfurt	46
France	Compagnie de Financement Foncier	Australia	3
France	Council of Europe	Swixx	23
France	Council of Europe	Italian	3
France	Council of Europe	Luxembourg	30
France	Dexia Municipal Agency	Frankfurt	45
France	Dexia Municipal Agency	Swixx	41
France	Dexia Municipal Agency	Australia	5
France	EDF	London	2
France	French Development Agency	Frankfurt	16
France	French Development Agency	London	2
France	French Development Agency	Swixx	10
France	French Electrical Company	London	2
France	French Principle	Frankfurt	26
France	French STRIPS	Frankfurt	66
France	OSEO B.D.P.M.E	Frankfurt	2
France	Région of Île de France	Frankfurt	9
France	Région of Île de France	Luxembourg	5
France	Région of Île de France	Swixx	10
France	Republic of France	London	1
France	Republic of France	Luxembourg	6
France	Republic of France	Frankfurt	55
France	Société Anony Gestiondes Stocks Sécurité	Frankfurt	5
France	Société Financement l'Economie Française	Frankfurt	19
France	Société Française du Radiotéléphone -SFR	Frankfurt	2
France	Union Nationale Interprofessionn Emploidan	Frankfurt	1
Gabon	Republic of Gabon	London	2
Georgia	Republic of Georgia	London	1
Georgia	Republic of Georgia	Frankfurt	1
Germany	City of Berlin	Swixx	3
Germany	City of Brandenburg	Swixx	3
Germany	City of Dresden	London	2
Germany	Development Bank NorthRhine-Westphalia	Australia	1
Germany	Europ. Bk f. Rec. a. Develop.	Swixx	15
Germany	European Bank Recovery and Development	Italian	5

Appendix I. Governments Listed in Foreign Countries 2010

Country	Government	Stock Exchange	Number of Issues
Germany	Free State of Saxony	London	2
Germany	Free State of Saxony-Anhalt	Luxembourg	18
Germany	Freistaat Bayern- Bavaria	Swixx	7
Germany	Gemeinsame Bundesländer	Swixx	4
Germany	German Postal Pensions Sec.	Swixx	5
Germany	Kred Wiederaufbau	Swixx	12
Germany	Land Baden-Württemberg	Swixx	3
Germany	Land Hessen	Swixx	11
Germany	Land Nordrhein-Westfalen	Luxembourg	37
Germany	Land Rheinland-Pfalz	Swixx	1
Germany	Land Thüringen	Swixx	4
Germany	Landw Rentenbank	Swixx	8
Germany	Nordrhein-Westfalen	Swixx	16
Germany	Pfandbriefstelle	Swixx	6
Germany	Republic of Germany	Swixx	20
Germany	Sachsen-Anhalt	Swixx	1
Germany	State of Brandenburg	Luxembourg	22
Ghana	Republic of Ghana	Frankfurt	1
Ghana	Republic of Ghana	London	2
Greece	Bank of Greece	London	2
Greece	Bank of Greece	Frankfurt	2
Greece	Black Sea Trade and Development Bank	Frankfurt	1
Greece	Hellenic Republic of Greece	Luxembourg	20
Greece	Hellenic Republic of Greece	Swixx	6
Greece	Hellenic Republic of Greece	Frankfurt	41
Greece	Hellenic Republic of Greece	Italian	2
Greece	National Mortgage Bank of Greece	London	3
Greece	Hellenic Republic of Greece	London	27
Guatemala	Republic of Guatemala	Frankfurt	1
Guatemala	Republic of Guatemala	Luxembourg	3
Guyana	British Guyana	London	2
Hong Kong	Kowloon Kanton Railway Corporation	Frankfurt	1
Hungary	Republic of Hungary	Frankfurt	36
Hungary	Republic of Hungary	London	7
Hungary	Republic of Hungary	Luxembourg	9
Hungary	Republic of Hungary	Swixx	26
Iceland	Republic of Iceland	Frankfurt	3
Iceland	Republic of Iceland	London	2
Iceland	Republic of Iceland	Luxembourg	2
Iceland	Republic of Iceland	Swixx	3
Indonesia	Republic of Indonesia	Frankfurt	13
Indonesia	Republic of Indonesia	Luxembourg	1
Ireland	German Postal Pensions Securitisation PLC	Frankfurt	5
Ireland	Republic of Ireland	Frankfurt	14
Ireland	Republic of Ireland	London	2
Ireland	Republic of Ireland	Swixx	11
Isle of Man	Isle of Man	Frankfurt	2
Israel	State of Israel	Luxembourg	5
Israel	State of Israel	NYSE	1
Israel	State of Israel	Swixx	3

Appendix I. Governments Listed in Foreign Countries 2010

Country	Government	Stock Exchange	Number of Issues
Israel	State of Israel	Frankfurt	3
Israel	State of Israel	London	2
Italy	Autonomous Region of Friuli-Venezia Giulia	Luxembourg	7
Italy	Autonomous Region of Valle D'Aosta	Luxembourg	1
Italy	City of Florence	Luxembourg	4
Italy	City of Milan	Luxembourg	1
Italy	City of Naples	Luxembourg	1
Italy	City of Rome	Luxembourg	2
Italy	City of Rome	Swixx	1
Italy	City of Turin	Luxembourg	1
Italy	City of Venice	Luxembourg	3
Italy	City of Verona	Luxembourg	1
Italy	Province of Milan	Luxembourg	2
Italy	Province of Naples	London	1
Italy	Province of Rome	Luxembourg	1
Italy	Region of Abruzzo	Luxembourg	5
Italy	Region of Campania	Luxembourg	2
Italy	Region of Lazio	Luxembourg	8
Italy	Region of Liguria	Luxembourg	4
Italy	Region of Lombardy	Luxembourg	1
Italy	Region of Marche	Luxembourg	3
Italy	Region of Molise	Luxembourg	2
Italy	Region of Piemonte	Luxembourg	2
Italy	Region of Puglia	Luxembourg	1
Italy	Region of Sardinia	Luxembourg	2
Italy	Region of Siciliy	London	2
Italy	Region of Siciliy	Luxembourg	2
Italy	Region of Tuscany	Luxembourg	1
Italy	Region of Umbria	Luxembourg	10
Italy	Region of Veneto	Luxembourg	1
Italy	Republic of Italy	EuroNext	1
Italy	Republic of Italy	Luxembourg	47
Italy	Republic of Italy	Swixx	22
Italy	Republic of Italy	Frankfurt	1
Italy	Republic of Italy	London	2
Ivory Coast	African Development Bank	Frankfurt	13
Ivory Coast	African Development Bank	London	1
Ivory Coast	African Development Bank	Swixx	7
Ivory Coast	African Development Bank	Luxembourg	19
Ivory Coast	Republic of the Ivory Coast	Luxembourg	6
Jamaica	Government of Jamaica	Frankfurt	8
Jamaica	Government of Jamaica	Luxembourg	8
Japan	City of Tokyo	London	1
Japan	City of Yokohama	London	1
Japan	Development Bank of Japan	Frankfurt	13
Japan	Development Bank of Japan	Swixx	7
Japan	Japan Expressway Debt Repayment Agency	Frankfurt	1
Japan	Japan Finance Corporation	Swixx	8
Japan	Metropolis of Tokyo	London	6
Japan	Osaka City Harbour Construction	London	1

Appendix I. Governments Listed in Foreign Countries 2010

Country	Government	Stock Exchange	Number of Issues
Japan	Republic of Japan	London	7
Jordan	Jordan Armed Forces	London	1
Kazakhstan	CJSC Development Bank of Kazakhstan	Frankfurt	3
Kazakhstan	Eurasian Development Bank	Frankfurt	1
Korea	Export Import Bank of Korea	Frankfurt	10
Korea	Export Import Bank of Korea	Swixx	4
Korea	Korea Development Bank	Swixx	2
Korea	Korea Development Bank	Frankfurt	3
Korea	Republic of Korea	Luxembourg	2
Korea	Republic of Korea	Swixx	1
Korea	Republic of Korea	Frankfurt	7
Latvia	Republic of Latvia	Luxembourg	2
Latvia	Republic of Latvia	Swixx	1
Latvia	Republic of Latvia	Frankfurt	3
Lebanon	Lebanese Republic	Luxembourg	24
Lebanon	Lebanese Republic	Frankfurt	8
Lithuania	Republic of Lithuania	Frankfurt	7
Lithuania	Republic of Lithuania	Luxembourg	9
Lithuania	Republic of Lithuania	Swixx	2
Luxembourg	Eurohypo SA, Luxembourg	Frankfurt	19
Luxembourg	Eurohypo SA, Luxembourg	Swixx	6
Luxembourg	Europäische Investitionsbank	Swixx	4
Luxembourg	European Bank Recovery and Development	Frankfurt	29
Luxembourg	European Bank Recovery and Development	London	118
Luxembourg	European Economic Community	Swixx	5
Luxembourg	European Investment Bank	London	6
Luxembourg	European Investment Bank	Swixx	147
Luxembourg	European Investment Bank	Italian	24
Luxembourg	European Investment Bank	Frankfurt	259
Luxembourg	Großherzogtum	Frankfurt	1
Luxembourg	Grand Duchy of Luxembourg	Swixx	1
Macedonia	Republic of Macedonia	Frankfurt	2
Macedonia	Republic of Macedonia	London	2
Malaysia	Malaysia Ministry of Finance	Luxembourg	1
Malaysia	Malaysia Ministry of Finance	Swixx	1
Malaysia	Republic of Malaysia	Frankfurt	1
Malaysia	Republic of Malaysia	London	1
Mexico	United Mexican States	Frankfurt	22
Mexico	United Mexican States	Luxembourg	26
Mexico	United Mexican States	Swixx	14
Morocco	Kingdom of Morocco	Luxembourg	1
Morocco	Kingdom of Morocco	Frankfurt	1
Netherlands	Akzo Nobel Sweden Finance AB	Frankfurt	3
Netherlands	BNG (Banking Serving Governments)	Frankfurt	107
Netherlands	BNG (Banking Serving Governments)	Swixx	90
Netherlands	BNG (Banking Serving Governments)	Australia	1
Netherlands	Dexia Fund	Frankfurt	18
Netherlands	FMO	Swixx	2
Netherlands	Kingdom of the Netherlands	London	1
Netherlands	Kingdom of the Netherlands	Frankfurt	20

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Country	Government	Stock Exchange	Number of Issues
Netherlands	Kingdom of the Netherlands	Swixx	6
Netherlands	Kommunalbanken	Swixx	5
Netherlands	Nederlandse Waterschapsbank	Swixx	13
Netherlands	Netherlands Principal	Frankfurt	8
Netherlands	Netherlands STRIPS	Frankfurt	23
New Zealand	Republic of New Zealand	London	4
New Zealand	Republic of New Zealand	Luxembourg	1
New Zealand	Republic of New Zealand	NYSE	1
New Zealand	Republic of New Zealand	Swixx	1
New Zealand	Republic of New Zealand	Frankfurt	4
Norway	City of Oslo	Frankfurt	1
Norway	Eksportfinans	Swixx	16
Norway	ExportFinans Norway	Frankfurt	17
Norway	Kingdom of Norway	Frankfurt	4
Norway	Kingdom of Norway	Swixx	1
Pakistan	Islamic Republic of Pakistan	Luxembourg	3
Panama	Republic of Panama	Luxembourg	11
Panama	Republic of Panama	Swixx	8
Panama	Republic of Panama	Frankfurt	4
Peru	City of Lima	London	1
Peru	Peru National Bank	London	2
Peru	Republic of Peru	Luxembourg	13
Peru	Republic of Peru	Swixx	4
Peru	Republic of Peru	Frankfurt	7
Philippines	Asian Development Bank	Frankfurt	32
Philippines	Asian Development Bank	Swixx	19
Philippines	Asian Development Bank	Luxembourg	52
Philippines	Asian Development Bank	Australia	6
Philippines	Republic of the Philippines	Luxembourg	20
Philippines	Republic of the Philippines	Swixx	7
Philippines	Republic of the Philippines	Frankfurt	19
Poland	City of Warsaw	Frankfurt	1
Poland	City of Warsaw	Luxembourg	1
Poland	Republic of Poland	Luxembourg	21
Poland	Republic of Poland	Swixx	22
Poland	Republic of Poland	Frankfurt	24
Portugal	Autonomous Region of Madeira	Luxembourg	2
Portugal	Empresa Desenvolvimento Infra-Estruturas	Luxembourg	1
Portugal	Metropolis of Lisbon	Frankfurt	2
Portugal	Republic of Portugal	Luxembourg	3
Portugal	Republic of Portugal	London	2
Portugal	Republic of Portugal	Frankfurt	20
Qatar	State of Qatar	Luxembourg	6
Qatar	State of Qatar	Frankfurt	6
R Congo	Republic of the Congo	Luxembourg	1
Romania	City of Bucharest	Frankfurt	1
Romania	City of Bucharest	Luxembourg	1
Romania	Republic of Romania	Frankfurt	3
Romania	Republic of Romania	Luxembourg	3
Russia	City of Moscow	Luxembourg	1

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Country	Government	Stock Exchange	Number of Issues
Russia	City of Moscow	Swixx	1
Russia	Russian Federation	Frankfurt	6
Russia	Russian Federation	Luxembourg	4
Russia	Russian Federation	Swixx	1
Saint-Vincent Grenad	Government of St. Vincent & Grenadines	Luxembourg	1
Senegal	Republic of Senegal	Frankfurt	1
Senegal	Republic of Senegal	Luxembourg	1
Serbia	Republic of Serbia	Luxembourg	1
Seychelles	Republic of the Seychelles	London	1
Singapore	Development Bank of Singapore	London	2
Slovakia	Republic of Slovakia	Frankfurt	10
Slovakia	Republic of Slovakia	London	3
Slovakia	Republic of Slovakia	Luxembourg	4
Slovakia	Republic of Slovakia	Swixx	5
Solvenia	Republic of Slovenia	Frankfurt	3
Solvenia	Republic of Slovenia	Luxembourg	3
South Africa	Development Bank of South Africa	Swixx	2
South Africa	Development Bank of South Africa	Frankfurt	2
South Africa	Republic of South Africa	Frankfurt	15
South Africa	Republic of South Africa	Luxembourg	12
South Africa	Republic of South Africa	Swixx	13
Spain	Ayuntamiento de Madrid	Frankfurt	3
Spain	Barcelona City Council	Frankfurt	1
Spain	City of Madrid	Swixx	1
Spain	Comunidad Autónoma de Aragón	Frankfurt	5
Spain	Comunidad Autónoma Castilla - La Mancha	Frankfurt	2
Spain	Comunidad Autónoma de Castilla y Léon	Frankfurt	6
Spain	Comunidad Autónoma de las Islas Baleares	Frankfurt	1
Spain	Comunidad Autónoma de Madrid	Frankfurt	1
Spain	Comunidad Autónoma de Madrid	Frankfurt	13
Spain	Comunidad Foral de Navarra	Frankfurt	8
Spain	Comunidad Madrid	Swixx	4
Spain	Fund for Ordered Bank Restructuring	Frankfurt	1
Spain	Generalitat de Catalunya	Frankfurt	20
Spain	Generalitat de Catalunya	Luxembourg	14
Spain	Generalitat de Catalunya	Swixx	1
Spain	Generalitat Valenciana	Frankfurt	8
Spain	Generalitat Valenciana	Swixx	2
Spain	Instituto de Credito Oficial	Frankfurt	44
Spain	Instituto de Crédito Oficial	Swixx	21
Spain	Junta de Andalucía	Frankfurt	14
Spain	Junta de Galicia	Frankfurt	5
Spain	Kingdom of Spain	Frankfurt	79
Spain	Kingdom of Spain	London	3
Spain	Kingdom of Spain	Luxembourg	6
Spain	Kingdom of Spain	Swixx	4
Sri Lanka	Democratic Socialist Republic of Sri Lanka	Frankfurt	1
Sweden	Akademiska Hus AB	Swixx	4
Sweden	Akzo Nobel Sweden Finance AB	Frankfurt	1
Sweden	City of Goteborg	London	26

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Country	Government	Stock Exchange	Number of Issues
Sweden	City of Stockholm	Luxembourg	4
Sweden	Goeteberg, Stadt	Frankfurt	1
Sweden	Goeteberg, Stadt	Swixx	2
Sweden	Kingdom of Sweden	Frankfurt	29
Sweden	Kingdom of Sweden	London	18
Sweden	Kingdom of Sweden	Luxembourg	3
Sweden	Kingdom of Sweden	Swixx	15
Sweden	Kommuninvest i Sverige AB	Swixx	8
Sweden	Stockholm, Stadt	Frankfurt	2
Sweden	Stockholm, Stadt	Swixx	2
Sweden	Swedbank Mortgage AB	Swixx	1
Sweden	Swedish Covered Bond Corp	Frankfurt	7
Sweden	Swedish Export Credit	Frankfurt	29
Sweden	Swedish Export Credit	Swixx	21
Sweden	Swedish Export Credit	Australia	1
Switzerland	Banca dello Stato del Cantone Ticino	Frankfurt	1
Switzerland	Basel-Stadt	Frankfurt	7
Switzerland	Bern-Stadt	Frankfurt	4
Switzerland	Biel-Stadt	Frankfurt	2
Switzerland	Emissionszent gemeinnützig Wohnbauträger	Frankfurt	11
Switzerland	Graubündner Kantonalbank	Frankfurt	4
Switzerland	Kanton and Republic of Neuenburg	Frankfurt	2
Switzerland	Kanton of Bern	Frankfurt	7
Switzerland	Kanton of Bern	London	1
Switzerland	Kanton of Frieburg	Frankfurt	1
Switzerland	Kanton of Geneve	London	1
Switzerland	Kanton of Genf	Frankfurt	3
Switzerland	Kanton of Luzern	Frankfurt	2
Switzerland	Kanton of St. Gallen	Frankfurt	2
Switzerland	Kanton of Tessin	Frankfurt	5
Switzerland	Kanton of Waadt	Frankfurt	4
Switzerland	Kanton of Zuerich	Frankfurt	6
Switzerland	Lausanne-Stadt	Frankfurt	5
Switzerland	Luzerner Kantonalbank AG	Frankfurt	10
Switzerland	MIGROS-Genossenschafts-Bund	Frankfurt	2
Switzerland	Pfandbriefzent schweizerischen Kantonbank	Frankfurt	40
Switzerland	Raiffeisen Schweiz Genossenschaft	Frankfurt	3
Switzerland	Schaffhauser Kantonalbank	Frankfurt	1
Switzerland	Schweizerische Eidgenossenschaft	Frankfurt	19
Switzerland	Schwyzer Kantonalbank	Frankfurt	7
Switzerland	St.Galler Kantonalbank	Frankfurt	12
Switzerland	Thurgauer Kantonalbank	Frankfurt	11
Switzerland	Winterthur-Stadt	Frankfurt	1
Switzerland	Zeurich-Stadt	Frankfurt	14
Switzerland	Zuger Kantonalbank	Frankfurt	3
Switzerland	Zürcher Kantonalbank	Frankfurt	12
Trinidad and Tobago	Republic of Trinidad and Tobago	London	1
Trinidad and Tobago	Republic of Trinidad and Tobago	Luxembourg	2
Tunisia	Central Bank of Tunisia	Frankfurt	4
Turkey	Republic of Turkey	Frankfurt	25

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Country	Government	Stock Exchange	Number of Issues
Turkey	Republic of Turkey	Luxembourg	21
Turkey	Republic of Turkey	Swixx	7
UK	Bank of England	Frankfurt	3
UK	Bank of England	Swixx	2
UK	Government Great Britain/Conversion Loan	Frankfurt	1
UK	Government of Great Britain/Treasury	Frankfurt	33
UK	London Stock Exchange	Frankfurt	2
UK	England War Bond	EuroNext	1
UK	Transport for London	Frankfurt	2
Ukraine	City of Kiev	Luxembourg	1
Ukraine	City of Kiev	Swixx	4
Ukraine	Government of Ukraine	Frankfurt	6
Ukraine	Government of Ukraine	Luxembourg	2
United Arab Emirates	Emirate of Abu Dhabi	Frankfurt	2
United Arab Emirates	Emirate of Abu Dhabi	London	6
United Arab Emirates	Emirate of Dubai	Frankfurt	2
United Arab Emirates	Emirate of Dubai	London	1
United Arab Emirates	United Arab Emirates	Frankfurt	1
Uruguay	Republic of Uruguay	Frankfurt	12
Uruguay	Republic of Uruguay	London	9
Uruguay	Republic of Uruguay	Luxembourg	17
Uruguay	Republic of Uruguay	Swixx	3
USA	City of Detroit	Luxembourg	6
USA	Corporacion Andina de Fomento	Swixx	1
USA	County of Los Angeles	Luxembourg	1
USA	Departmento del Tesoro USA T-Bills	Mexico	-
USA	Departmento del Tesoro USA T-Bonds	Mexico	-
USA	Departmento del Tesoro USA T-Notes	Mexico	-
USA	Fannie Mae	Frankfurt	23
USA	Fannie Mae	Luxembourg	59
USA	Federal Home Loan Banks	Frankfurt	10
USA	Federal Home Loan Banks	Luxembourg	48
USA	Freddie Mac	Luxembourg	118
USA	Freddie Mac	Mexico	-
USA	Freddie Mac	Swixx	4
USA	Government National Mortgage Association	Luxembourg	5
USA	InterAmerican Development Bank	Frankfurt	43
USA	InterAmerican Development Bank	London	88
USA	InterAmerican Development Bank	Swixx	18
USA	InterAmerican Development Bank	Italian	2
USA	Inter-American Development Bank	Luxembourg	4
USA	Inter-American Development Bank	Australia	1
USA	International Bank Recovery Development	Luxembourg	168
USA	International Bank Recovery Development	Frankfurt	103
USA	International Bank Recovery Development	London	2
USA	International Bank Recovery Development	Swixx	62
USA	International Bank Recovery Development	Italian	1
USA	International Finance Corporation	Luxembourg	51
USA	International Finance Corporation	Australia	2
USA	International Finance Corporation	Frankfurt	12

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Country	Government	Stock Exchange	Number of Issues
USA	NYSE EuroNext	Frankfurt	1
USA	State of Connecticut	Luxembourg	10
USA	State of Illinois	Luxembourg	9
USA	State of Oregon	Luxembourg	7
USA	State of Wisconsin	Luxembourg	12
USA	US STRIPS GEN.IN.	Frankfurt	5
USA	US TR.STRIPS	Frankfurt	42
USA	US Treasury	Frankfurt	97
USA	Federal Home Loan Mortgage	Frankfurt	48
Venezuela	Bolivarian Republic of Venezuela	Frankfurt	18
Venezuela	Bolivarian Republic of Venezuela	Luxembourg	20
Venezuela	Bolivarian Republic of Venezuela	Swixx	6
Venezuela	Corporación Andina de Fomento	Frankfurt	3
Vietnam	Socialistic Republic of Vietnam	Frankfurt	2
Vietnam	Socialistic Republic of Vietnam	Luxembourg	3
Yugoslavia	Former Republic of Yugoslavia	Swixx	2