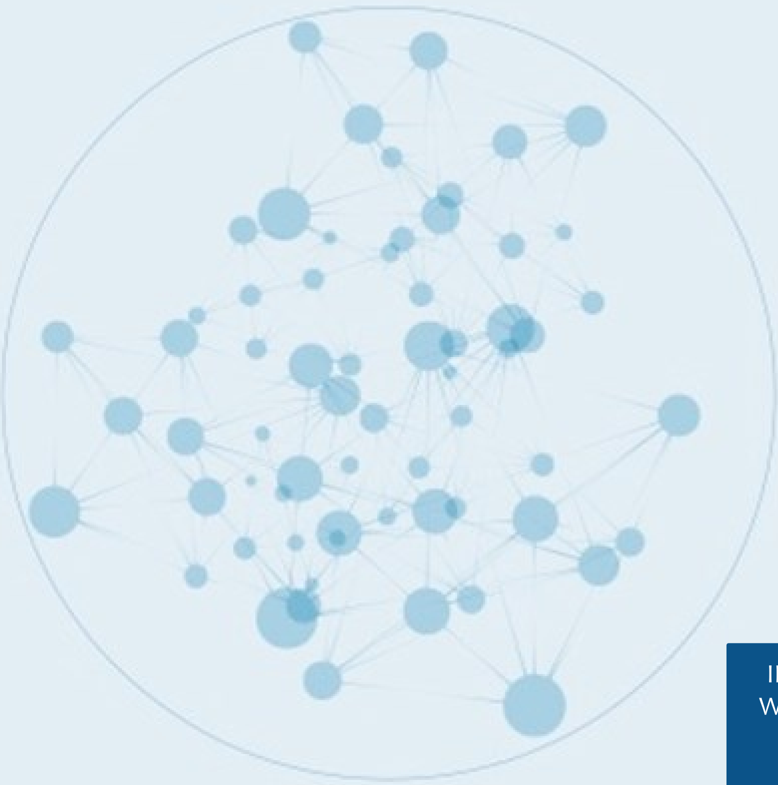
Inquiry: Design of a Sustainable Financial System

UNEP

CREATING A SUSTAINABLE FINANCIAL SYSTEM

A Role for Finance Ministries



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The UNEP Inquiry

The Inquiry into the Design of a Sustainable Financial System has been initiated by the United Nations Environment Programme to advance policy options to improve the financial system's effectiveness in mobilizing capital towards a green and inclusive economy—in other words, sustainable development. Established in January 2014, it will publish its final report in October 2015.

More information on the Inquiry is at: *www.unep.org/inquiry* or from: Ms. Mahenau Agha, Director of Outreach *mahenau.agha@unep.org*.

About this report

Bart van Liebergen is the main author of this working paper. Errors and omissions are the responsibility of the authors.

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Executive summary

This paper investigates various roles that finance ministries can assume to promote those policies, regulations and standards which help to create a sustainable financial system. Finance ministries typically interact with the financial sector in many ways, from regulator and supervisory mandate setters to tax authority and sovereign debt issuers. All of these points of leverage empower them to play a key role in making financial systems sustainable.

Sustainability is still a relatively new concept in financial sector policy, which has in the past decade been preoccupied with strengthening financial stability and supporting economic growth. In this paper, a sustainable financial system is taken to be a financial system that performs its central functions, such as the provision of savings possibilities and the allocation of capital, while taking into account the demands and needs of the economy, society and the environment.

From this definition, a framework inspired by Cihak et al (2012) is developed to outline key characteristics of a sustainable financial system. They discuss four key characteristics of financial systems in supporting economic growth and poverty alleviation: depth, access to finance, efficiency of intermediation and financial stability. In addition, the extent to which a financial system incorporates environmental externalities into its process for allocating capital, and its ability to provide financing with a structure and maturity fitting sustainable investment needs are proposed here as ways of benchmarking the system's environmental sustainability. Lastly, access to finance and the transparency of the capital allocation process are proposed as indicators of social sustainability.

Sustainability is not often regarded to be part of a finance ministry's policy mandate. Therefore, this paper looks at cases where finance ministries use their mandates to bring about innovation in the space. In conclusion, under the current mandates of finance ministries, much has already been done to begin creating significant openings that stimulate sustainability in the financial sector.

To that end, the paper discusses several cases relevant to financial sector sustainability. First, it takes a look at debt management by the Ugandan Finance Ministry, which uses a new debt management strategy to effectively manage sovereign debt and develop domestic financial markets. Second, it compares the roles of the British and Dutch finance ministries in developing remuneration regulation. A third case assesses the South African Treasury's push for financial inclusion and responsible investment. The fourth case compares the German and French 'energy transitions' based on the roles their finance ministries played in these transitions, and their respective focuses on the financial sector.

1 Introduction

Thought leadership around the financial sector went through some profound changes in the past decade. While a well-developed financial sector was said to support economic growth and stability, the financial crisis reminded us that advanced financial systems could also pose a threat to the economy. A lot of policymaking has tried, in the meantime, to bolster financial stability and strengthen the sector's ability to support economic objectives. The UNEP Inquiry takes this discussion further by investigating how we can develop a financial system that not only supports the economy, but takes the needs of the environment and society into account as well in executing its core functions, in other words, a sustainable financial system.

Stimulating sustainability in the financial sector requires the involvement of a wide range of actors. Of course, financial institutions are at the centre of any transition to sustainability. Yet supervisors, regulators, sector associations, different institutions of government and civil society also need to play an important role.

This paper investigates various roles that finance ministries can assume to promote those policies, regulations and standards which help to create a sustainable financial system. It will first examine the concept of sustainability itself in order to better define and specify some of the requirements of a sustainable financial sector. Based on this theoretical framework, it will then take a look at empirical cases where finance ministries are using their mandates to move the financial sector towards sustainability objectives.

Assessing the effectiveness and efficiency of the measures brought forward by finance ministries discussed in the case studies is beyond the scope of this paper. The goal of reviewing the case studies is rather focuses on showcasing the creativity displayed by finance ministries working within their mandates, whether it is in sovereign debt management or political agenda setting: it can hold lessons for the advancement of sustainable financial systems, as it reveals the space for action within their mandates.

2 A framework for financial sector sustainability

This section will first propose a framework for assessing the sustainability of a financial sector, based on definitions of sustainability and a review of existing literature on the functions of the sector in relation to the economy. Second, it will briefly discuss the selection of case studies in this paper.

2.1 Sustainability and the financial sector

In the wake of the financial crisis of 2008-09, a lot of attention turned to the relationship between the development of the financial sector and the health of the economy. Policymakers and academics identified financial stability as a key precondition for economic growth and stability. The crisis had shown that excessive risk-taking combined with a low loss-absorbing capacity of the financial system could threaten the stability of the financial sector and have enormous costs for the economy as a whole. Hence, post-crisis financial policy has concentrated on improving financial stability. Increased capital requirements should bolster the resilience and stability of the sector, while too-big-to-fail policies such as resolution requirements should curb excessive risk-taking. Improved financial stability should support economic growth and stability by dampening the impact of financial shocks on the real economy, curbing excessive lending and minimizing the externalization of costs of failure of financial institutions.

Due to the central role of the financial sector in the economy, an increasing body of literature, including the UNEP Inquiry into the Design of a Sustainable Financial System, takes the view that the sector should not only bolster stable economic growth, but sustainable development at large. Following the classic Brundtland definition, sustainability concerns "development that meets the needs of the present without compromising the ability of future generations to meet their own needs".[1] The UNEP Inquiry applies this definition in its broadest form, covering the three dimensions of the economy, society and the environment.[2] A sustainable financial system is then taken to be *a financial system that performs its central functions, such as the provision of savings possibilities and the allocation of capital, taking into account the demands and needs of the economy, society and the environment*.

What characteristics should such a system have? Based on existing literature, one can construct a framework to help determining these characteristics. Such a system might also be used to assess the effectiveness of the financial system in this regard. Cihak, Demirgüç-Kunt, Feyen and Levine (2012) discuss four key characteristics of financial systems in supporting economic growth and poverty alleviation:[3]

- *Depth:* empirical research shows a strong positive influence of financial depth (often approximated by the ratio of private credit to GDP) and economic growth.
- *Access:* As Cihak et al. write, "a well-functioning financial system allocates capital based on the expected quality of the project and entrepreneur, not on the accumulated wealth and social connections of the entrepreneur."
- *Efficiency* concerns the cost of intermediating credit between savers and investors. An efficient financial system should be able to provide debt financing to be available for productive investments against a reasonable price.
- *Financial stability* is a precondition for economic stability (as discussed above). This factor can be a trade-off with depth and access: while a higher credit-to-GDP ratio implicates a greater availability of finance for investors, excessive lending can lead to financial and economic booms and busts when excessive finance is channelled into unproductive investments.

This framework can be extended to cover the performance of the financial system within the two other dimensions of sustainability. The following section proposes some key characteristics that would make financial systems more sustainable in an environmental and societal sense. This should be seen as an initial proposal – the characteristics proposed are, for the most part, hard to observe empirically. Yet, they might add some considerations to the debate on financial sector sustainability.

Environment

Impacts that the financial system has on the environment primarily take the shape of externalities of investments. In economics, externalities constitute a side effect or consequence of an industrial or commercial activity that affects other parties without this being reflected in the cost of the goods or services involved.[4] A classic example of an environmental externality is pollution from a factory financed by the financial system. Externalities can also be positive, such as the creation of a waterway which brings added benefits for biodiversity. However, most of the economic growth in the past decades has been unsustainable, with externalities of economically productive investments leading to environmental degradation and climate change.[5] As externalities, the costs and consequences of pollution or biodiversity degradation are not borne by the investors, but are outsourced to society and the environment.

It follows that the environmental sustainability of a financial system should be assessed by *the extent to which it incorporates environmental externalities in the capital allocation process*. However, this variable is very hard to verify empirically.

Economy

Another characteristic may concern the structure of the financing supplied by the sector. Short-termism and a preference for liquidity are often argued to be inherent to the financial sector's investment behaviour.[6] Liquidity ensures that investors can quickly shift portfolio allocations when financial risks materialize. Often, the investment behaviour of institutional investors is guided by short-term performance benchmarks. Short-termism and liquidity preference may discourage investors from investing in sustainable investments.[7] At the same time, sustainable investments generally may require financing with long maturities. Low-carbon infrastructure often requires high upfront costs for investment, but "has significantly lower operating expenses and a longer expected lifespan than fossil fuel assets".[8] Renewable energy investments, for example, have no intrinsic fuel price risk, as opposed to traditional energy investments. Since their initial costs often make a higher proportion of total costs, longer maturities are needed for repayment.

As a result, the *ability to provide financing with a structure and maturity fitting sustainable investment needs* (for example, measured by an institution's ratio of financing supplied to the real economy with a maturity longer than a year over total assets) could be another defining characteristic of an environmentally sustainable financial system. At the same time, one could argue that a financial system which incorporates environmental externalities into its capital allocation would naturally adapt its financing to match the needs of sustainable investment, as unsustainable investment would be relatively unattractive due to the incorporated externalities.

Society

The third dimension of sustainability is society. One can argue that a financial system that promotes societal sustainability should contribute to equal opportunities for all citizens, be accountable to and reinforce the rule of law (i.e., not contribute to corruption or crime) and allows the State to perform its core functions. Crucial here is that all citizens have equal *access to finance*.

Access to finance is, of course, also part of the economic dimension of sustainability. Yet where it serves the function of supporting economic growth, access to finance should, from a social perspective, be provided as an equal opportunity for all people in society.

Also, a financial sector's workings (the way it supplies savings products and allocates capital) should be *transparent* in order to prevent money laundering or the financing of corruption and crime. Banking secrecy is a clear example of diffusion in the financial system, creating opportunities for crime and corruption. Transparency should improve the system's accountability and the ability of the government to tax its citizens.

2.2 A framework for assessing the role of finance ministries in promoting financial sector sustainability

The question this paper ultimately attempts to answer is where finance ministries fit in this framework, and how they use current mandates to contribute to sustainability in the financial sector. As a first step, this section briefly takes stock of the different interactions between the financial sector and finance ministries, and explores how these roles could, in theory, be used to promote sustainability in the sector.

2.2.1 Regulator

Finance ministries are often the primary regulator of the financial sector on a wide range of topics ranging from prudential requirements to remuneration, reporting requirements, anti-money laundering, conduct and fiduciary duty. This regulation is instrumental in shaping the structure and behaviour of the sector. Many also participate in negotiations on international regulatory standards, such as accounting standards (International Accounting Standards Board, Financial Accounting Standards Board and Solvency II (EU)). With the central role attributed to the Financial Stability Board in the post-crisis international regulatory architecture, finance ministries are now also involved in setting international prudential standards, such as Basel III and systemically important financial institution (SIFI) policies.

2.2.2 Member of international financial institutions

Institutions such as the IMF and the World Bank monitor risks in the international financial system and promote economic and financial development. Ministries could use their membership to push for the monitoring of environmental and social risks on the global agenda. For example, in its most recent country assessment of China, the IMF has paid prominent attention to environmental risks, articulating the need for China to choose a more "inclusive and environmentally-friendly growth path".[9]

2.2.3 Setting the mandate of supervisors

Financial supervisors are often granted a large degree of independence from the government to prevent political influence from affecting supervision and monetary policy. However, supervisors often obtain their mandate from the finance ministry, to which most of them are accountable.[10] According to the IMF, monitoring systemic risks and maintaining financial stability is part of the mandate of about 90 per cent of the banking-only supervisors, and about two thirds of supervisors responsible for the entire financial sector.[11] As providers of the mandate, finance ministries can extend this mandate to include assessments of environmental and social risks.

2.2.4 Tax and fiscal authority

Taxes are one of the most important instruments for governments to influence behaviour in the economy and society. Finance ministries are often the creators of tax and fiscal policy. In the financial sector, taxes can alter the risk/return profile of an investment class, an example being the current practice of taxing equity more than debt. Taxes can also be levied over activities, such as a banking tax or a Tobin tax. Thus, taxes can be used to incorporate externalities into the capital allocation process.

2.2.5 Sovereign debt issuer

Finance ministries issue sovereign debt through which the government finances its operations. Qualified as risk-free and often in abundant supply, sovereign debt performs an important role in the financial sector as an investment asset. Finance ministries could issue green bonds to promote their use in the financial system. The large volumes of sovereign debt issuances enable finance ministries to instantaneously create a liquid market with a significant supply in such instruments, making it attractive for other issuers to follow, since issuing in liquid markets is attractive for bond issuers as it decreases the liquidity premium paid on bonds.

2.2.6 Macro prudential authority

The role of macro prudential authorities is to identify and act on systemic risks in the financial system that individual financial institutions have no incentive to act upon.[12] In many countries, they bring together supervisors, regulators and the finance ministry in one body. Ministries could use their membership to push for the inclusion of ecological risks along guidelines put forward in a growing body of academic literature.[13]

2.2.7 Political/public agenda setter

Through their political leadership, finance ministries can put issues on the political agenda in order to create political or public support, or at least start a discussion.

2.2.8 Economic policy setter

Finance ministries are often involved in setting economic policy, allowing them to embed financial sector policy within wider economic or societal considerations. Financial regulation can then be informed by both financial stability requirements and economic needs. This would closely align with the World Bank's view on the objective good financial regulation "to better align private incentives with public interest, without taxing or subsidizing private risk taking".[14]

3 Case studies: current practice of finance ministries acting in fields related to sustainability

3.1 Selection of the case studies

This study assesses six case studies of finance ministries acting in a field relevant to financial sector sustainability. Cases have been selected to cover a range of finance ministries' activities pertaining to the financial sector and different aspects of sustainability (economy, environment, society) as discussed in the previous chapter. Attention has also been paid to covering developing as well as advanced economies. An overview is given in this table:

Case	Finance ministry activity	Dimension of sustainability
Uganda	Sovereign debt management	Economy, society
Netherlands, UK	Remuneration regulation	Economy
South Africa	Regulation/codes and charters	Environment, society
France, Germany	Agenda setting, fiscal policy	Environment, economy

3.2 Uganda's innovations in sovereign debt management

For governments, the primary goal of issuing debt is to finance their operations and fill liquidity gaps between expenditures and government income. Minimizing the costs of debt, rollover and interest rate risks are often the main targets for the responsible government agencies. However, governments are increasingly realizing that issuing government debt and managing it prudently can be used for other purposes as well. The Ugandan Ministry of Finance, Planning and Economic Development (MoFPED) serves as a case in point.

Uganda's sovereign debt management has a tumultuous history. In the second half of the 20th century, the Ugandan government built up debts to high, unsustainable levels. As a result, previous debt strategies (starting in 1991) all emphasized debt sustainability and the search for highly concessional financing as their goals. After the country qualified as a Heavily Indebted Poor Country (HIPC) in the 1990s, a series of debt reliefs followed. The 2007 Debt Strategy also focused on debt sustainability and minimizing financing costs.[15]

In 2013 Uganda changed the focus of the country's debt management through its Public Debt Management Framework (PDM2013). In the years following 2007, Uganda had managed to keep its debt to sustainable levels, experienced an economic upturn and saw increasing development of its financial sector.[16] The new Framework reflected these improvements; next to the more traditional strategic objectives of (i) "meeting financing requirements at the minimum cost, subject to a prudent degree of risk" and (ii) "ensuring a sustainable level of public debt in the medium and long term", a third objective was added: (iii) "to promote the development of the domestic financial markets". The MoFPED considered this debt policy framework to be an integral part of the government's overall macroeconomic strategy.[17]

In so doing, the Finance Ministry is bringing together several parts of its mandate in order to create a new policy that serves these different purposes at once: the mandate to "mobilize local and external financial resources for public expenditure" and to "formulate policies that enhance stability and development".[18]

Several principles in the PDM2013 promote the development of domestic financial markets. On the one hand, the principles of openness, transparency, predictability and debt sustainability in the issuance of domestic debt should stimulate domestic demand for treasuries. The ministry therefore commits to the publication of debt management performance reviews, debt sustainability reviews, and issuance calendars. Interestingly, the Finance Ministry also announces that it will hold debt buybacks periodically in order to create a liquid secondary market for treasuries.[19] On the other hand, the introduction of a cap on the ratio of the domestic government debt stock over private sector credit should prevent crowding out of private sector debt. This ratio should ensure that the domestic sovereign stock will not outgrow the stock of private credit.

In promoting financial market development, the PDM2013 uses new possibilities opened due to financial innovation. The Ugandan Finance Ministry gives a role to new financing structures by broadening the scope of debt management "beyond traditional explicit external and domestic debt … to include implicit debt and contingent liabilities such as those arising from public private partnerships". It also capitalizes on new possibilities in debt management by using innovative financial products, such as hedging rollover risks of debt buybacks with swaps.

Third, the framework capitalizes on the added value of new financing instruments in conducting monetary policy. The 2007 debt management framework only provided for the domestic issuance of sovereign debt as a tool of monetary policy, with no explicit issuance conducted for fiscal or cash management purposes. The new framework recognizes that monetary policy can now be conducted through financial products such as repos and reverse repos, allowing for the issuance of domestic debt to be used for the development of domestic financial markets.

By aiming for the development of financial markets, the PDM2013 offers a remedy for some of the financial weaknesses in Uganda. The World Bank identified the absence of a significant pensions sector to support the market for long-term finance, and the dominance of foreign currency denominated assets on financial sector balance sheets as important vulnerabilities.[20] The availability of long-term investment assets denominated in the home currency through the government debt strategy should promote the development of a pensions system, increase the savings rate, and in the end support the market for long-term finance. Uganda's PDM2013 shows how, when consistently and systematically applied, the management of sovereign debt can serve macroeconomic purposes beyond just debt control.

3.3 Shaping remuneration policies after the crisis in the UK and the Netherlands

After the financial crisis, finance ministries and regulators have shown increasing creativity and innovation in designing policies regulating risks in the financial sector, using tools that were previously outside of their toolkit. An example is the development of policies regulating remuneration in the financial sector – while deemed to be beyond the scope of regulators before the crisis[21] - several institutions and countries swiftly moved to this field after analyses of the crisis indicated their influence on risk-taking in financial institutions.

This discussion on the development of remuneration policy after the crisis compares the different roles the UK Treasury and the Dutch Ministry of Finance have taken on in this debate. In order to influence behaviour and the culture in the financial sector beyond the incentives provided by more traditional tools like capital and liquidity requirements, both have introduced stricter legislation on remuneration. While both countries have been at the forefront of the development of remuneration policy, there are large differences to note as well.

The United Kingdom

The UK was the first country to take action on financial sector remuneration as a response to the 2008-09 financial crisis. High levels of remuneration in the sector caused public outrage during the crisis, reaching a climax when Royal Bank of Scotland CEO Goodwin was awarded a pension after the bank was nationalized.

Rather than the Treasury, it is the Financial Services Authority (FSA), the primary regulator of the UK financial services industry, that became responsible for action on remuneration. In line with its regulatory objective of contributing to financial stability, the FSA did not take on remuneration as a moral issue, but as a matter of risks to financial stability.[22] Bonuses, it argued, could create incentives for excessive risk taking by bank employees and leadership.[23] According to Katherine Braddick, Director at the Prudential Regulation Authority (PRA, a successor to the FSA), "a key principle … is ensuring that incentive structures are set up to encourage appropriate behaviour and risk taking"[24]

Since intervention in the field of remuneration was new to the FSA (and in fact, new to regulators around the world), it faced the challenge of finding the right role to assume and the right tone to strike in a new policy field. At the time, it faced criticism that it had been slow to recognize variable remuneration as a risk to the stability of the financial sector. FSA director Adair Turner reiterated that "if you roll back to 2005-06, [remuneration policy] was not believed to be the responsibility [of the FSA] and if we had suggested it was the responsibility then we would have been met with a wildfire of criticism from the industry which I think would have received some significant support from politicians as well".[25]

In a communication to banking sector CEOs in October 2008, the FSA said it saw remuneration practices as contributing to excessive risk taking before the crisis and announced that in the future, it would "include a strong focus on the risk consequences of remuneration policies within its overall assessment of firms".[26] The following year, it formulated a Remuneration Code, providing guidance to financial institutions on eight principles including the set-up of remuneration committees in financial institutions, the requirement of a long-term horizon for measuring a person's performance, and of remuneration policies to "take into account sound risk management principles".[27] Hard requirements on the level and character of a bonus were not included.

Remuneration legislation in the UK has been developing since, with the initiative moving from the supervisor to the political sphere, and with the content changing from principles-based to rules-based intervention. The current policy finds its origins in the government's response to the Parliamentary Commission on Banking Standards Report of June 2013.[28] Rather than providing for general guiding principles, the 2014 Code lays down specific requirements for bonuses. It provides for a cap on variable remuneration at 100 per cent of fixed remuneration (or 200 per cent with shareholders' agreement) in line with the EU's Capital Requirements Directive IV (CRD IV). The Code also requires that a minimum of 40 per cent of variable remuneration be deferred for at least 3 years, subject to "malus-cancellation of the unvested deferred remuneration under certain circumstances, including misconduct and action that led to a failure in financial performance or risk management of the firm".[29]. It applies to "risk takers and senior management of banks, building societies and investment firms".

The involvement of the Treasury in the policy process since 2009 has been rather limited, most likely because, first, the supervisor (the FSA) and not the Treasury is responsible for most financial regulation in the UK.[30] Involvement of the Treasury is only required when changes in legislation, rather than in regulation, are needed. Accordingly, the Treasury has kept required changes in legislation to a minimum. The FSA's new regulations on remuneration fit within its existing mandate.[31] At the same time, it seems Parliament had a more active role in driving regulation than the government (and thus the Treasury) per se, as shown by the effect of the report of the Parliamentary Commission on Banking Standards. Action thus required a more direct engagement of the UK Parliament with the FSA in these matters. In both respects, the UK situation differs from the Netherlands, where the finance ministry writes most of the financial legislation and the ministry obtained a driving role in the process through the inclusion of the matter in the governing coalition's political agreement.

The Netherlands

With a ratio of banking assets to gross domestic product peaking at more than 600% just before the crisis of 2008-09, the Netherlands used to have one of the largest financial sectors in the world in relative terms.[32] In the crisis, Dutch banks suffered large losses and as a result several institutions received government support in order to recover. One of the largest Dutch banks, ABN AMRO, was nationalized by the government in October 2008. The enormous costs incurred by the Dutch State in supporting the sector led to resentment among the public about the high salaries and bonuses received by those institutions' managers just before the crisis. The bankers were felt to have outsourced the costs and risks of their work to the taxpayer while they had personally enjoyed the benefits of banking activities.

In response, the government took a closer look at remuneration policy in the sector. The first initiatives to regulate remuneration were mostly aimed at altering the variable remuneration policies of those financial institutions that received government support. As the new shareholder of ABN AMRO, Finance Minister Wouter Bos introduced a new, more stringent remuneration package for the bank's management and top officials, lowering salaries and capping bonuses as a percentage of total salary.[33] This policy was later extended by codifying in law the remuneration limits for financial institutions that have received government support.[34] The Ministry also sought to introduce "claw back" arrangements for bonuses granted on wrong premises.

After the first shock of the crisis passed, financial sector bonuses came under scrutiny not only on moral grounds, but also for prudential reasons. The Financial Stability Forum (FSF), an international prudential standard setter, which soon after, pushed along, among others, by the UK's Financial Services Authority, gave rise to the Financial Stability Board, argued that "high short-term profits [in the financial sector] led to generous bonus payments to employees without adequate regard to the longer-term risks they imposed on their firms. These perverse incentives amplified the excessive risk-taking that severely threatened the global financial system."[35] In response, the FSF developed the Principles for Sound Compensation Practices. The goal of these principles is "to align compensation with prudent risk-taking", but they are not intended to prescribe "particular designs or levels of individual compensation".

The Dutch government used the analysis of the FSF to develop measures going further than the FSF recommendations. In late 2012, a new government consisting of a coalition of the Labour party and the Liberals came into office. Part of the political agreement underpinning their ruling coalition was to install a legally binding limit on financial sector bonuses of 20% of the fixed salary. As primary legislator for the financial sector, the Finance Ministry obtained responsibility for the legislative process. However, setting remuneration policies for the sector would bring the ministry into unchartered territory. While the

Finance Ministry's mandate concerning the financial sector is formulated broadly as "advising the minister on policy regarding financial markets and supervision",[36] salary and remuneration standards in the Netherlands are traditionally not set by the government. Rather, they are part of collective labour agreements between employer organizations and unions. Those matters of labour policy which involve the government are primarily the responsibility of the Ministry of Social Affairs.

As such, the Finance ministry explained why the financial sector would require different treatment than other sectors in this regard. "In the financial sector, (large) risks can be taken easily, and they can materialize swiftly. Due to the interconnectedness of the different activities in the sector, the consequences of this can be extensive. Furthermore, the financial sector has leaned heavily on the support of society in the last couple of years. The associated costs accrue to their customers and the tax payer. This makes the financial sector different from other sectors."[37]

The legislative proposal provided for a cap on variable remunerations of 20% of fixed remuneration in the Dutch financial sector from 2015 and beyond. The Dutch Central Bank was given the task of supervising compliance with the law and required to report on a yearly basis to the Finance Ministry.[38] However, when the proposal was discussed in Parliament, it was met with significant doubt – not only from opposition parties, but also from the Liberal part of the ruling coalition. Opponents feared that remuneration caps would harm the international competitiveness of the Dutch financial sector or thought the proposal generally went too far in regulating the sector. Yet the political agreement in the governing coalition previously reached on this topic meant that Finance Minister Jeroen Dijsselbloem had sufficient political support for the proposal. By the 1st of January, 2015, the "bonus law" came into effect.

Analysis

By comparison, the finance ministries of the Netherlands and the UK play divergent roles. Why did regulatory action involve the Treasury significantly less in the UK than it did the Finance Ministry in the Netherlands? The rules introduced in the Netherlands did not go much further than those in the UK. Both regulations today provide legal numerical limits to bonuses, albeit at different levels.

The most important reason seems to be that the British supervisor works from a wider interpretation of its mandate than the Dutch supervisor. While in both cases they are responsible for maintaining financial stability, the Dutch central bank acting as the primary supervisor, orients its actions around government legislation. The FSA, on the other hand, was actively involved in creating sector regulation as such was clearly moving outside of existing regulatory areas. Therefore, regulatory action in the Netherlands might have required the involvement of the Finance Ministry, while the UK Treasury pushed for regulation within the existing mandate of the FSA.

These examples reinforce the notion of the important role that political contexts can play. Dijsselbloem saw remuneration policy as an important point on his political agenda. With him taking the initiative on regulation, a role for his ministry was evident. In the UK, governments seem to have been less outspoken on remuneration issues, with Parliament taking on a more active role. As a result, the Parliament and the FSA engaged directly with each other in introducing the Remuneration Code.

Both cases, with supervisors and regulators developing new tools and exploring new grounds within their mandate, fit well in the post-crisis international regulatory landscape – a landscape characterized by "a massive commitment to the reassertion of state power over financial markets, firms, actors and investors".[39] At the same time, they show how differences in institutional and political contexts in countries can lead to a different division of labour in taking on the same topic.

3.4 South Africa's sustainable investment framework

Since the South African government abandoned apartheid in 1994, it has faced the huge challenge of overcoming social inequality and divisions in society. To this day, South African society remains characterized by large, racially based income and social inequalities.[40] This challenge has also been visible in the country's financial sector and financial sector policymaking. In particular, access to finance for the poor, for black people and for SMEs has been a problem, impeding economic development.[41] Policy initiatives have not always been successful. For example, the introduction of mutual banks in 1993 through the National Treasury's Mutual Bank Act was intended to extend access to financial services to a larger share of the population. Mutual banks were designed to be "less formal and simpler" than existing commercial banks, and were based on the principle of mutuality. Unfortunately, they were not a success: in 2001, only two mutual banks remained.[42]

Since 2000 the sector, the regulator and the supervisor have worked on a range of further initiatives in the field of sustainability and inclusion, which include: the financial sector code on black economic empowerment, the recent revision of Regulation 28 in the Pension Fund Act, and the Code for Responsible Investing in South Africa (CRISA). This section will look at the role of the National Treasury in this process.

The financial sector code for black economic empowerment was the first significant regulatory initiative in the field of sustainability and inclusion and was published in 2004. This code is in fact self-regulation, rather than regulation. While the government, and the National Treasury in particular, put the development of the code on the public agenda, it was further taken on by a coalition of business, labour and community constituencies, with the government functioning as an observer. The goal of the code was to "promote a transformed, vibrant and globally competitive financial sector that reflects the demographics of South Africa, and which contributes to the establishment of an equitable society by providing accessible financial services to black people and by directing investment into targeted sectors of the economy."[43] It consists of detailed clauses committing the sector to such things as conducting a share of its procurement from black SMEs and paying them timely, ensuring the provision of affordable banking services and credit to the poor and SMEs, and committing a share of profits to financial education.[44]

Regulation 28 of the Pension Fund Act was introduced by the National Treasury on 1 January 2012. This regulation intended to overhaul the prudential requirements for pension funds in South Africa. The previous prudential requirements for pension fund investment were regarded as too strict. According to the consultation responses, "limits on alternative investments, and unlisted equity in particular, were... considered overly strict in a manner that could impede investment into this pro-development funding channel. …Investment into Africa, while better facilitated, could be further promoted to support economic growth in the region and the positioning of South Africa as a regional financial centre."[45] Regulation 28 was meant to address these concerns.

First, it allowed for more investment into unlisted and alternative assets such as private equity, enabling pension funds to invest in infrastructure and other long-term investments.[46] Second, it was meant to align pension fund regulation with the Treasury's objective of stimulating socially responsible investment.[47] Due to the complexity of operationalizing sustainability and socially responsible investing, Regulation 28 does not provide for specific rules in this field – even though the rest of the Regulation is primarily rules-based – but principles.[48] It requires a fund to "explicitly consider its approach to ESG issues (with respect to its investments)".[49] And the preamble of the Regulation states that prudent investing "should give appropriate consideration to any factor which may materially affect the sustainable long-term performance of a fund's assets, including factors of an environmental, social and governance character".

Third, CRISA was introduced by the institutional investment sector in 2011. It promotes five principles supporting institutional investors in applying responsible investment practices, including ESG factors. CRISA is a voluntary sector code which specified the general sustainability clauses introduced by the Treasury in Regulation 28. For example, where Regulation 28 required pension funds to consider its approach to ESG, CRISA lays down specific requirements for their ESG policies. While the Treasury was not involved in the creation of CRISA, it seems to have been able to get the private sector to execute the Treasury's agenda with self-regulation. The address given by Finance Minister Pravin Gordhan at the launch of CRISA in July 2011 makes it clear: "Some may question the efficacy of a voluntary code such as CRISA. … If the relevant people take ownership of them, voluntary codes can work perfectly. If we do not take ownership … we will have to look for other solutions."

Conclusion

South Africa's National Treasury is a good example of a finance ministry clearly engaging on themes within the field of financial sector sustainability, inserting ESG and sustainability considerations into the prudential framework for pension funds and into the financial sector conduct codes. To that effect it has, with restraint, used the powers within its mandate. The Treasury has a wide mandate, ranging from the coordination of macroeconomic policy, fiscal policy, the management of a government-owned investment company. Regarding the financial sector, the Financial Services Board (FSB), an independent agency within the department, and the Treasury share legislative authority, while the FSB also oversees part of the sector.[50]

Instead of primarily engaging the sector through regulatory and legislative action, the Treasury seems to favour an approach where it fulfils an agenda-setting role, leaving the elaboration of the initiatives to civil society and/or private sector platforms. Regulation 28 can also be interpreted that way: with its principles-based ESG clauses, it is merely a first step on the path of sustainability. CRISA's investment requirements are much more specific, and as such it can be seen as a further interpretation of Regulation 28.

In his speech, Finance Minister Gordhan further highlighted the government's thoughts on the distribution of roles between the public and private sectors, concluding that "there are significant challenges to finding the right balance between government regulation and self-regulation. …As a society, we must move to a state of taking responsibility for our decisions and actions, without the need to always be compelled to do so by law."[51]

3.5 The energy transition plans of Germany and France

France and Germany, the largest economies of the Eurozone, have both been actively exploring ways of increasing private sector finance for sustainable investments. The French ministry of economy, finance and industry has been one of the first finance ministries in the developed world to formulate a comprehensive strategy aimed at increasing the sustainability of its financial sector, with the goal of financing an "ecological transition" in the economy. Germany is an international frontrunner in renewable energy production. Private finance has played a decisive role in financing the investments needed for this transition. With both countries being active in their own way, it is interesting to look at the role finance ministries have played in both efforts, and the impacts of their involvement.

France

In the presidential elections of 2012, Socialist candidate François Hollande promised the electorate that he would start a national energy transition. His plans focused on a reduction in the share of nuclear energy in national energy production from 75% to 50% by 2025 and an increase in the share of renewables to 40% by 2030.[52] The extensive legislative proposal for an energy transition drawn up by Hollande together with his Environment minister Ségolène Royal was adopted by Parliament on 18 August 2015. Even though the actual implementation of the plans cannot be critically assessed at this stage, a look at the plans of the Hollande administration illustrates the role of finance ministries in greening the economy and financing sustainability.

What has made Hollande's proposal relatively special is the role awarded to greening the financial sector as part of the energy transition. In their November 2013 White Paper on financing ecological transition of, the Finance Ministry and the Environment Ministry elaborate on the role of finance in driving sustainability.[53] The paper argues for active State intervention in financial markets to increase the share of finance devoted to sustainable purposes: "Public authorities must... encourage stakeholders to take into consideration the current and future societal impacts of the degradation or loss of environmental resources in their investment choices." To that end, several measures proposed by the paper target investors and the financial sector:

1. Encouraging investments in SMEs through regulation of institutional investors and tax incentives for investments.
2. Improving the dissemination of non-financial information across the funding chain of savers, investors and bond issuers through disclosure requirements. This should increase transparency on issues in the investment chain, including "natural capital accounting".
3. Developing inclusive measures of existing economic variables such as GDP.
4. Taxing financial instruments based on their maturity, encouraging medium and long-term savings over short-term invested savings.
5. Devising accounting standards better suited to long-term investors than the currently used fair value or mark to market accounting standards.
6. Building on the existing socially responsible investment market through improved standardization and definition of its objectives and practices while extending the existing environmental, social and governance (ESG) reporting framework to private and public institutional investors.[54]

The French sustainable finance strategy seems to go well beyond the more mainstream recommendations to align financial markets with the needs of the economy. While one set of measures matches the current international proposals aimed at supplying long-term finance for investments,[55] the White Paper goes further, also discussing measures aimed at internalizing environmental and social externalities in the investment process of the sector. Examples are the development of natural capital accounting and inclusive economic measures.

However, the measures mentioned in the White Paper are still far from actual implementation. Several measures in the White Paper, for example the application of natural capital accounting, are not yet well developed enough to be applied in practice (the first proposals for natural capital accounting are currently being tested by several NGOs, but are not ready for application yet). Instead, the White Paper seems to have been written with an agenda-setting purpose, touching upon issues that have not belonged to the standard legislative terrain before.

In conclusion, the French Finance ministry sees a case for structural change in financial markets to support sustainable investments in the economy, by internalizing environmental aspects of investments in the financing process and better matching the supply of finance with the demand for finance. The paper shows the active role of the ministry in that process: setting an ambitious agenda for greening financial markets, and explicitly seeing a role for the ministry itself in that process.

Germany

With 25% of its electricity generated from renewable energy sources compared to 6% ten years ago, Germany has been able to induce a great turnaround in the energy sector, called "Energiewende" (energy transition).[56] Being one of Europe's largest renewable energy infrastructure investments during the past few years, the financing of the Energiewende and the role of the finance ministry in this process can hold lessons for policies aimed at greening financial sectors.

The German government is actively involved in supplying concessional financing to climate projects domestically and abroad.[57] 45% of German climate financing comes from concessional public sources such as grants, concessional loans and subsidies. However, the picture is very different in the market for renewable energy, where 98% of financing is supplied by private actors.[58] The reason for this discrepancy is the set-up of the renewable energy market in Germany. The central mechanism in the market is an electricity feed-in tariff, introduced to encourage investments in renewable energy technologies. The tariff is a surcharge on the price of electricity, paid by the energy users, and the benefits of the tariff are paid to the producers of renewable energy. With the benefits of the feed-in tariff increasing the expected returns on renewable energy, it becomes more attractive for private actors to invest in renewable energy production.

The feed-in tariff has led mostly small companies, cooperatives and even private citizens to invest in renewable energy. Large, traditional energy suppliers in Germany have hardly invested. In 2012, 47% of the renewable energy production capacity was owned by citizens and cooperatives (small partnerships between citizens and small businesses); traditional energy suppliers accounted for only 12%.[59] One reason is that traditional electricity suppliers already had ample production infrastructure in place when the Energiewende began – by investing in renewables, they would create competition to their existing production (as renewable electricity has priority in the system over electricity generated from traditional sources).[60] Instead, the tariffs have made it attractive for small businesses and citizens to invest in their own small scale energy production facilities.

The fragmented nature of the Energiewende seems to have made investments less interesting for traditional institutional investors such as insurers, pension funds and banks. Due to their small size, most local projects have large transactions costs, typically making them less interesting for large institutional investors. However, Germany has alternative suppliers of credit. A substantial part of financing to the economy is supplied by the small-scale but universally present Volksbanke, Sparkasse and Landesbanke.[61] Used to financing small scale investments like in SMEs, these local banks also play a substantial role in financing fragmented investments in renewables. While larger banks may generally enjoy lower financing costs, these local banks enjoy the benefit of having better knowledge of local markets, enabling them to better judge the viability of local project proposals. That makes them well suited to finance the small-scale renewable energy investments of the Renewable Energy Act.

The German Finance ministry has not been very involved in the energy transition, which is remarkable given the scale of private financing raised for the Energiewende during the past couple of years. The German government has set up an energy investment policy tailored to the character of the German financial sector, with Landesbanke functioning as a primary financier of small-scale investments and larger institutional investors financing the larger projects. The government did not deem necessary to further intervene in financial markets. Finance Minister Wolfgang Schäuble's opinion of the energy transition in early 2014, stating that "we did it too good and now we have to correct because otherwise we have an increasing of energy costs.... Therefore, we have to rebalance."[62] might explain the restraint of the Finance ministry.

Conclusion

The two examples presented here showcase how two large European economies have both succeeded, with ambitions targets, in raising private financing for sustainable investments, each in very different ways and by attributing very different roles to their finance ministries. The White Paper of the French Finance ministry has shown that it is willing to test the waters and set a longer-term course of intervention in financial markets to support an ecological transition. It plans to increase the share of sustainable finance and internalize externalities in the investment process by taxing and regulating financial institutions and markets and by setting up new market infrastructures, which is in line with the traditional role of government in France – government intervention is seen as an effective way of steering the economy and the financial sector to socially desirable paths.

This is different in Germany, where a major transition in its energy supply was achieved using limited public funds, while private money was raised through a public intervention mechanism designed to increase the risk/return profile of renewable energy investments and make them more interesting to private actors. The government did not intervene in financial markets and the Finance ministry's involvement has been very limited. The German government did not have the ambition of creating a sustainable financial sector the way the French White Paper does, or of including internalizing externalities better in the investment process. Irrespective of this, the creation of the Renewable Energy Act succeeded in aligning the economy and the financial sector very effectively to support sustainable investment.

4 Exploring the potential of finance ministries in creating a sustainable financial sector

This paper looked at six cases of Finance ministries acting in a field relevant to financial sector sustainability: France, Germany, the Netherlands, South Africa, Uganda and the United Kingdom. The ministries have shown that they have, within their mandates, multiple opportunities to contribute to the creation of a sustainable financial sector. This section will attempt to summarize some of the lessons learned from existing initiatives lead by Finance ministries which relate to financial sustainability.

4.1 Developing financial sector regulation

The case of the Netherlands is an example of a finance ministry acting as a financial sector regulator. Increasingly, regulation is also used to integrate environmental and social risks (ESR) and sustainability considerations to the investment process of the financial sector. As regulators, finance ministries can play a decisive role in applying these new innovations to their own jurisdictions. A prominent example is the field of accounting and reporting standards, which are used to determine the value of assets and liabilities on the balance sheets of financial institutions and for creating transparency on an institution's creditworthiness and investment behaviour. The development community is currently working on natural capital accounting (NCA) standards which should allow for the inclusion of environmental impacts in an asset's rating or value. To that end, it maps the natural environment in terms of stocks and flows, as in the financial sector. This methodology would allow for better comparability between assets than the environmental risk assessments currently used. NCA could thus inform financial supervisors, managers and investors in matters such as risk management, investment decisions and prudential oversight.

Pilot projects of natural capital accounting are already used by several governments, such as Botswana,[63] Colombia, Guatemala and Madagascar. The Costa Rican Finance Ministry has even introduced a law requiring the government and the private sector to incorporate relevant natural capital data into proposed project plans.[64]

Accounting is just one example in which innovations are creating the possibility for integrating sustainability matters in the financial sector. Capital requirements are also developing: Brazil and Indonesia are considering the introduction of bank capital requirements with environmental risk weights. Lebanon, aiming to influence bank lending practices, has introduced reduced reserve requirements for assets financing energy efficiency.

4.2 Setting the mandate of supervisors

As the examples have shown, some supervisors enjoy wider mandates than others. Often, the interpretation of the mandate is also dependent on local customs or practice. While the FSA and DNB, the UK and Dutch supervisors, had roughly the same mandate, the FSA enjoyed more regulatory autonomy in practice than DNB does. As providers of the mandate, finance ministries can extend this mandate to include assessments of environmental and social risks.

Yet it is not sure if an extension or change of the supervisory mandate is always necessary in this regard. The question is rather whether environmental and social risks are systemic risks – in which case they would already be part of many supervisory mandates. Increasingly, finance ministries and supervisors seem to agree with this. In the UK, the Prudential Regulation Authority (PRA, a successor to the FSA) is currently conducting a Climate Change Adaptation investigation into the insurance sector.[65] DNB recently informed the Dutch parliament on the carbon exposure of the financial sector.[66] Neither action has required a change of mandate. This could open the way for a range of supervisory actions in the field of sustainability: the identification of stranded assets, requiring banks to publicly disclose environmental risks, conducting ESR assessments of asset portfolios of financial institutions, and performing green stress tests based on climate scenario analyses. Private actors have already moved into this field: an example is Mercer's "Climate Change Scenarios - Implications for strategic asset allocation" report, which stress-tests the portfolios of several large institutional investors using climate change scenarios.[67]

4.3 Sovereign debt management

The Ugandan Finance Ministry used its sovereign debt management to stimulate the creation of domestic capital markets. Finance ministries could also use their issuance clout to catalyse markets for green bonds. As of mid-2015, no nation has issued green bonds. However, in the US, Massachusetts has done so and the state of New York is considering it.[68] Massachusetts issued 20-year bonds which will pay for projects improving water quality, increasing energy efficiency and cleaning up pollution.

4.4 Political agenda setting

Even if ministries do not translate initiatives into regulation or supervision, they can have an impact on the financial sector by putting issues on the political agenda. The South African Treasury put ESG and sustainability issues on the agenda in dialogues and agreements with the private sector, but has also left the development of the corresponding policies largely up to the sector. The central position of finance ministries enables them at the same time to work with Parliament, advise the government, and engage with civil society and the public sector. They can use this exposure to raise public support and awareness for sustainability in the financial sector.

The reverse is true as well: finance ministries do not operate in isolation, but in political contexts in which they are accountable to and can be influenced by other actors – most prominently Parliament and the sitting administration, but also civil society and the financial sector. In the UK, a coalition of private investors and NGOs successfully engaged with the Bank of England (BoE), the Treasury and other governmental organizations, asking the BoE to investigate the financial sector's exposure to polluting and environmentally damaging investments and any related systemic risks.[69]

5 Conclusion

The mandates of finance ministries around the world are already allowing for significant action to make their domestic financial sectors more sustainable while ensuring that they better suit the needs of the real economy and society. Finance ministries have acted in fields relevant to financial sector sustainability, and have done so in very different ways. South Africa and France have presented broad agendas to align the financial sector with the needs of the real economy and society. Uganda, the UK and the Netherlands have worked on more targeted policies, either in debt management and remuneration policy or by mapping high-carbon exposures of the sector. Germany has successfully focused on raising private finance for renewable investments, devoting less attention to regulating or mapping environmental risks in the existing portfolios of the sector.

Finance ministries roughly share the same combination of mandates. They are generally responsible for taxation, the government budget, sovereign debt management, financial sector issues, and they represent their governments in international organizations such as the IMF and the World Bank. Finance ministries of larger countries are also members of the Financial Stability Board and the G20 financial working groups. Some of them are also responsible for macroeconomic policy (in other countries, a separate Economic Affairs or Business ministry is). This gives finance ministries a central position in the government.

In the power chain supervising and regulating the financial sector, finance ministries occupy an equally strong position – one that has been bolstered since the crisis. International standard setting (e.g. Basel III and SIFI policies) has moved from central bank-dominated forums such as the Basel Committee to the Financial Stability Board, of which finance ministries constitute a significant share of the membership. Ministries have often become part of macro prudential supervisory authorities, reinforcing their position in sector supervision. Finance ministries are also issuers of sovereign debt – an investment asset class of crucial importance to the sector.

Their diversity of roles pertaining to the financial sector gives finance ministries a lot of potential impact in pushing for sustainability in the sector, particularly when ministries push a consistent agenda across their different mandates. For example, the development of green credit guidelines for banks can be complemented with the issuance of green sovereign bonds as investment assets and the execution of supervisory assessments of environmental risks in bank asset portfolios. Finance ministries can thus create both the incentives and the possibilities for financial institutions to move to a sustainable business model.

At the same time, the examples show that the actual distribution of tasks and responsibilities between finance ministries and other actors can differ widely. Regardless of their official mandates, institutions develop practical working relationships that might differ in other countries: the introduction of a new piece of legislation in the UK hardly needs the involvement of the Treasury, while the same kind of legislation is primarily Finance ministry-driven in the Netherlands. Countries also differ in the kind of solutions they favour. Where possible, South Africa prefers self-regulation of the sector over regulation on some sensitive social issues. And while the French sustainability strategy provides for a broad regulatory agenda, Germany's Energiewende is financed through a feed-in tariff.

This shows how finance ministries operate primarily in a political environment with political leadership accountable to parliament. The opportunities for making the financial sector more sustainable are widespread, however, anyone wishing to engage finance ministries on the topic should be sensitive to these local differences and contexts.

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