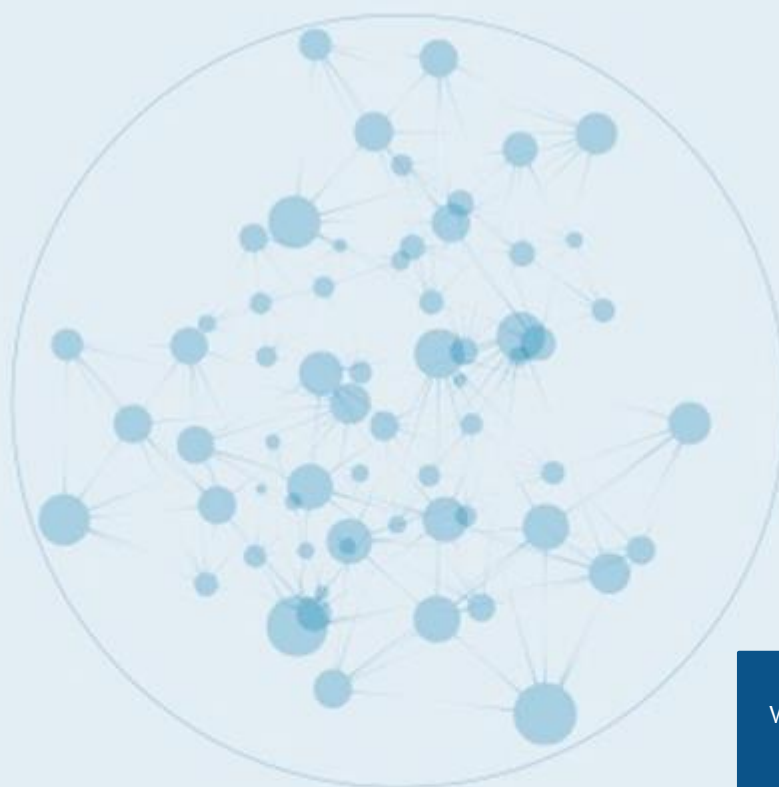




GOVERNMENT SUBSIDIES TO THE GLOBAL FINANCIAL SYSTEM

A Preliminary Exploration



INQUIRY
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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 published its final report, *The Financial System We Need*, in October 2015 and is currently focused on actions to take forward its findings.

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

About the project

This report was authored by students of the Johns Hopkins University School of Advanced International Studies (SAIS), working with their faculty advisor, Professor Irving Mintzer, as part of a practicum project in the Energy, Resources and Environment Program. SAIS practicum teams partner with key organizations to address critical international environmental policy challenges. In this case, the practicum team collaborated with the United Nations Environment Program (UNEP) Inquiry into the Design of a Sustainable Financial System to examine the value of subsidies from governments to the private sector global financial system and to understand how these subsidies affect the effort to achieve the United Nations Sustainable Development Goals (SDGs). UNEP provided financial support to the project team and guidance in furtherance of this practicum project.

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Energy, Resources and Environment Practicum

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Any remaining errors or gaps in understanding are solely our responsibility.

Comments are welcome and should be sent to nick.robins@unep.org.

This paper builds on an earlier, unpublished draft titled *Government Subsidies to the Global Financial System – A Review of the Literature*.

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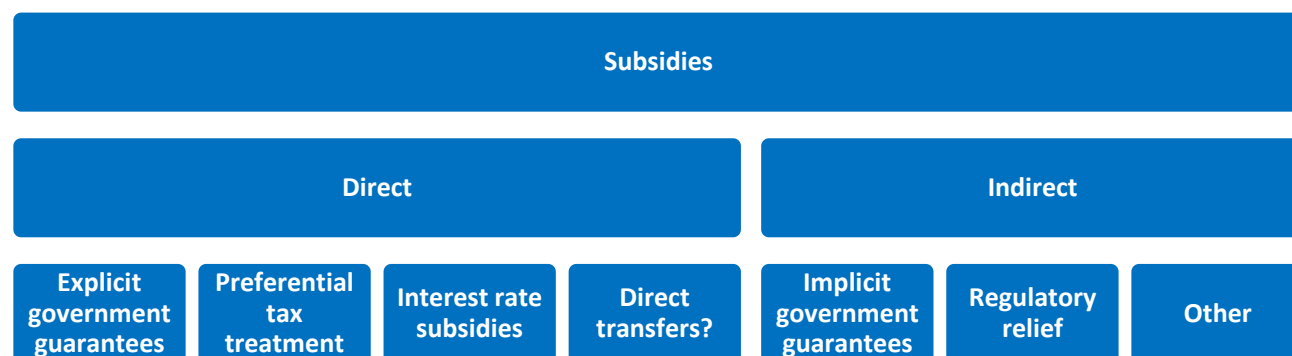
Executive Summary

The primary goal of the present study is to understand the character and to estimate the total value of subsidies, both direct and implicit, from governments to the private sector institutions that make up the global financial system.

A secondary objective of this analysis is to deepen our understanding of the extent to which the existing suite of subsidies to the private financial sector tends to advance or obstruct the global effort to achieve the United Nations Sustainable Development Goals (SDGs).

In carrying out this preliminary exploration of subsidies to private sector financial institutions globally, we conducted an extensive review of the peer-reviewed literature, seeking to identify credible estimates of the most important subsidies to each of the major communities of institutions that comprise the ecosystem of the global financial services sector. Where several such estimates were found, the most comprehensive estimate based on sound data has been selected. In cases where credible estimates were only available for a small number of countries, we have tried to extrapolate those estimates to the remainder of each community in the financial services sector ecosystem, based on a comparison of the relative size of the institutions for which data was available compared to the full community of institutions that receive a similar form of subsidy.

Figure 1: Typology of Subsidies Utilized in this Study



In order to estimate the total value of the annual direct and implicit subsidies that governments provide to these communities within the global financial system, we have relied on estimates that can be found in the peer-reviewed open literature. We have not done any new primary research.

The principal financial entities that we have focused on as potential beneficiaries of government subsidies include:

- systemically important financial institutions (SIFIs),
- the shadow banking system,
- offshore financial centres, and
- large banks and financial institutions benefiting from quantitative easing (QE)

Our initial and preliminary estimates for the value of the annual worldwide support (direct plus implicit subsidies) to private financial sector institutions in these communities within the global financial system is shown in Table 1.

Table 1: Annual Subsidies to the Private Financial Sector

	Billions per year (est.)
Systemically important financial institutions	US\$155-295
Shadow banking system	US\$2
Offshore financial centres	US\$190-255
Beneficial impacts of quantitative easing	US\$41-84
Other subsidies (to public institutions, sovereign wealth funds, pension contribution tax breaks)	US\$133-357
Approximate total	US\$521-993

The full impact of many of the policies that create subsidies to the global private financial sector cannot be estimated today with a high degree of confidence. We believe that the range suggested above is conservative and significantly underestimates the true value of these subsidies. For some of the identified subsidies, the data needed for quantification is either incomplete or inconsistent for many countries. Therefore, in the context of this study, in all cases where the value of a subsidy cannot be quantified with confidence or the data is sparse and incomplete, we have arbitrarily assigned a value of zero to that particular element of subsidy.

How might subsidies to the private financial sector affect sustainable development outcomes?

While the notion of taxpayers footing the bill for reckless investment choices at major banks evokes major distaste in the wake of the financial crisis, implicit government guarantees will probably remain a factor in efforts to maintain financial stability, as environmental factors begin to pose material risks to the financial sector. Ensuring that the provision of direct and indirect subsidies is clearly linked to prudent management of these risks – including through entrenchment in industry-standard risk management practices, such as stress testing – remains as an important policy priority.

Importantly, many countries around the world have already begun to take steps to link the provision of financial sector subsidies with sustainable development, through the use of mechanisms such as interest rate subsidies, tax treatment, and calibration of capital requirements:

- in Bangladesh, banks providing loans for green projects can access the Bangladesh Bank's refinancing arrangements and pass on preferential interest rates to their clients;¹ and
- in Indonesia, OJK, the financial regulator, is also considering variations in capital provisioning that allow reductions in core capital requirements for institutions that engage in green lending.

In certain countries, monetary authorities are also indirectly subsidizing financial decisions that support sustainability outcomes: the Central Bank of Bangladesh, for example, allows banks that provide loans to key green sectors to treat these as high-quality assets in terms of their assessment of each institution's Capital adequacy, Asset quality, Management quality, Earnings, Liquidity and Sensitivity to market risk (CAMELS).

Efforts to align existing subsidies with the needs of a low-carbon, climate-resilient economy could allow governments to achieve the aspirations outlined in their Intended Nationally Determined Contributions (INDCs) without any incremental burdens being placed on public treasuries. Furthermore, such a redirection of the existing subsidies could allow governments to achieve these goals without exposing important financial institutions to any significant increase in risk.

Areas for further research

The accounting presented in this study is preliminary and necessarily incomplete. We believe that the range of values presented above for subsidies to the private financial sector is neither exhaustive nor completely accurate. Indeed, the choices we have made in constructing the component elements of these estimated values are conservative and deliberately understate the actual value of the identified subsidies. We offer the current estimate to promote a broader and more detailed discussion of these issues and to stimulate further investigations at the national level by others. Clearly, this is an important but unexplored area of research that may prove to have implications for fiscal, financial and environmental policies.

A preliminary agenda for action in this area could consider the following research priorities:

Expand the scope of analysis: A better understanding of subsidies to the demand-side of finance is needed, including of subsidies to individual households, which could be leveraged to support sustainable development outcomes. In addition, subsidies to corporate enterprises that promote the efforts of companies to raise capital as debt borrowed from financial institutions rather than as equity invested in their core businesses create implicit subsidies to those financial institutions. We also believe that it is important to assess the extent to which preferential tax treatment offered by many governments for individual retirement savings accounts acts as an implicit subsidy to the financial institutions that manage these accounts and sell the financial products held in them by individual consumers.

Expand the geographic range of coverage: Our analysis has highlighted significant gaps in the geographic coverage of relevant data on subsidies to different asset classes in the global financial system. Some of the most important gaps are found in the information available concerning the financial systems in major developing countries and emerging markets, including Brazil, China, India, Indonesia, Mexico, Nigeria, Saudi Arabia and South Africa. Going forward, more targeted analyses are needed to characterize flows of subsidies in these systems, and to identify potential leverage points for alignment with sustainable development goals in the context of broader green finance initiatives.

1 Introduction

1.1 Context

Financing sustainable development requires a significant reallocation of capital flows towards the critical national priorities that are represented by the UN Sustainable Development Goals to which 195 countries have now agreed. In addition, achieving these goals will require a significant shift of investment flows away from unsustainable and polluting assets and activities. Although sufficient funding is available in the roughly US\$300 trillion in assets that make up the global financial system, current asset allocations and investment patterns are not adequate to meet the investment needs required in the transition to a low-carbon, climate-resilient economy.

Recent estimates of the unmet demand for these investments suggest that substantial amounts of additional capital will be required:

- The United Nations Conference on Trade and Development (UNCTAD) has estimated that US\$5-7 trillion per year will be required to finance the Sustainable Development Goals.²
- Investment in low-carbon solutions (particularly energy efficiency) must be scaled up to the tune of over US\$1 trillion per year.³

Importantly, in addition to driving investment towards the deployment of low-carbon infrastructure and technology, the financial system will have to reallocate capital away from unsustainable investments (including high-carbon assets). Large amounts of investment capital will be required to support developing countries in implementing a clean development strategy that is able to meet the needs of currently underserved populations in those countries, and strengthen the resilience of their economies in the face of impending environmental shocks.

Overcoming these challenges will require a systemic response that combines both market and policy innovations. Many leaders have recognized that mobilizing capital for the transition will require reforms in the real economy (such as efforts to price environmental externalities, including carbon emissions). But it is also becoming clear that a continuation of traditional regulation and policy strategies within the financial sector may exacerbate existing barriers to that transition within the real economy.⁴

In the wake of the financial crisis, interest and attention to the use of public balance sheets to bolster economic growth increased – as evidenced most clearly by the introduction of successive financial stimulus packages through the process of QE. At the same time, pressing sustainability challenges are reshaping the post-crisis stimulus narrative into one of achieving sustainable economic growth. Many countries are now questioning how best to harness the financial system in order to deliver sustainable development. A broad landscape of innovation is emerging, as described in the UNEP Inquiry's global report, *The Financial System We Need*.⁵ Nonetheless, the very significant public financial support historically provided to the private financial services sector has not been assessed from a sustainable development perspective.

Today, the growth, sustainability and financial stability agendas are increasingly interlinked. In that context, questions of policy coherence and alignment are emerging as central priorities for governments, financial regulators and financial institutions. A key emerging question is how the range of existing channels of public intervention in the financial system – including the use of public balance sheets to subsidize financial institutions – may have implications for sustainable development outcomes, as well as implications for the broader objectives of financial stability and economic growth.

Since the financial crisis, governments have become increasingly intertwined with the private financial and capital markets through a complex network of direct and indirect subsidies. These subsidies take a variety of forms and benefit a range of different actors, including financial intermediaries, along with the owners and managers of capital. This paper examines the structure and distribution of these subsidies in order to present a preliminary estimate of annual flows of such subsidies at a global level. It explores how these flows may impact sustainable development outcomes. In so doing, this paper attempts:

- to understand the character and estimate the total value of the subsidies to a defined group of financial institutions, identifying where key knowledge gaps exist;
- to hypothesize how such subsidies may introduce distortions to financial markets that may affect capital allocation choices, thereby affecting the capacity of the financial system to respond to the needs of a low-carbon, climate-resilient economy; and
- to assess what next steps need to be taken to advance thinking in this critical area, which is likely to increase in relevance as the global economy continues to be faced with continued threats to growth, the increasing implementation of unconventional monetary policies and mounting sustainability challenges.

1.2 Methodology and Scope of Analysis

The analysis in this paper is based upon a thorough exploration of research in institutional and peer-reviewed academic literature and interviews with experts in the field. We have completed a preliminary analysis of the main categories and cumulative annual value of these subsidies.

From a geographic perspective, this initial exploratory study has attempted to be global in scope. We have drawn upon the existing resources in the peer-reviewed economic literature that provide estimates of the total value of subsidies by governments globally to specific types of institutions within the financial services ecosystem. We realize that these published estimates have relied upon data that is most robust for institutions in the subset of industrialized countries that make up the G8. Major gaps exist in the data concerning many of the additional countries that comprise the G20 group of the world's largest economies. We understand the unavoidable inaccuracies resulting from this approach but we believe that the countries for which good data exists provide the majority of subsidies to the private financial services sector globally. Nonetheless, we hope in the future to sharpen this analysis as improved data becomes available with respect to the full suite of G20 countries and for large emerging market economies.

The estimates discussed below in some cases have extrapolated from published analyses to the world as

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