

How the Quality of Macro-Institutions and Corporate Governance Influence International Profit Shifting?

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Abstract

Profit shifting structures deployed for tax management by many multinational corporations have recently come under intense regulatory scrutiny and heated public debate around the world. At the heart of the debate is the fact that profit shifting can often lead to conflicting outcomes for societies, shareholders and managers — posing complex financial and ethical dilemmas. In a recently published paper we propose a conceptual framework of the underlying costs and incentives of profit shifting in a multi-stakeholder world. We analyze the pathways through which the quality of a country's macro-institutions and corporate governance jointly determine the eventual net-gains of profit shifting. We deliberate on the salient aspects of the paper from the perspective of decision makers — shareholders, managers, and policy makers.

Corporate Profit Shifting: Relevance to Managers and Policy Makers

Multinational corporations frequently optimize overall global tax incidence by tweaking profits declared in different countries through elaborate accounting structures. Estimates suggest that profits are shifted at an enormous scale globally. The OECD/G20 Base Erosion and Profit Shifting (BEPS) project estimate 4% to 10% loss in global corporate incomes tax revenues — about USD 100 to 240 billion annually — due to profit shifting.¹

In a large emerging economy like India, ours is first of the kind empirical investigation of profit shifting using company micro-data and the findings confirm profit shifting to the tune of about 6% of total pre-tax earnings of foreign companies based in India.²

Given the undesirable externalities and ubiquity of corporate profit shifting, in recent years the issue has acquired unprecedented political salience, and profit shifting structures are under tremendous regulatory scrutiny.

Multinational enterprises in today's world span so many tax jurisdictions that tax-planning has become inextricably interlinked to their global strategy. Consequently, understanding the inter-linkages between the firm's strategic decision making and the global taxation landscape has become imperative for effectively managing global operations of the MNE.³

In recent times, several cases of high-profile MNCs involved in profit shifting through artificial accounting structures has pushed the debate on profit shifting to the forefront of public glare. The case of Apple in USA and Google in the UK are two such highly publicized cases of profit shifting investigation by the respective tax authorities.

According to estimates in 2015, Apple Inc. tops the list of companies in the USA with most money held in offshore accounts.⁴ The top ten companies on the list together hold close to one trillion US dollars in offshore accounts operating through more than 500 foreign subsidiaries (Table 1). Examining Apple's offshore accounts, in the opening statement of the report prepared by the Permanent Subcommittee on Investigations, U.S. Senator John McCain, said: "Apple's corporate tax strategy is fueled by the company's fixation on reducing U.S. tax payments. ... It is completely outrageous that Apple has not only dodged full payment of U.S. taxes, but it has managed to evade paying taxes around the world through its convoluted and pernicious strategies."

The public commentary on Google's multi-billion dollar tax-avoidance case in the UK was equally scathing. The chair of the UK public accounts committee said that Google's tax-avoidance practices were "devious, calculated and, ... unethical", he further said: "You are a company that says you 'do no evil.' And I think that you do do evil."⁵

In both these cases, companies argue that their tax-planning strategy is legitimate and driven purely by economic efficiency. While corporations may employ legally compliant tax-planning structures to maximize shareholder value, yet profit shifting leads to incompatible consequences for multiple stakeholders. Given these adverse outcomes for stakeholders and affected parties, the option to engage in profit shifting poses complex ethical dilemmas for corporate executives.

Under the assumption that managers work towards maximizing overall stakeholder value, we model two fundamental conflicts that unravel the relationship between the quality of macro-institutions and corporate governance on profit shifting behavior.

Table 1: Top 10 Companies in the US with Most Money Held Offshore (2015 Estimates)

Company	Amount Held Offshore (USD millions)	Number of Tax Haven Subsidiaries
Apple	214,900	3
Pfizer	193,587	181
Microsoft	124,000	5
General Electric	104,000	20
IBM	68,100	16
Merck	59,200	125
Google	58,300	1
Cisco Systems	58,000	56
Johnson & Johnson	58,000	62
Exxon Mobil	51,000	35
Total	989,087	504

Compiled by authors using data from: CTJ (2016, October 4). Offshore Shell Games 2016, *CTJ Reports*. Retrieved from http://ctj.org/ctjreports/2016/10/offshore_shell_games_2016.php.

The first key conflict is due to the disconnect profit shifting creates between the country of economic value creation, or place of value added, and the jurisdiction where the actual tax dues are paid. Consequently, when companies avoid paying their fair share of the dues for using public goods and infrastructure in a country, the tax burden unfairly shifts to other domestic businesses and ordinary citizens. The resulting tax-base erosion and loss of tax revenue shrinks the government fiscal budget. The impact could be particularly worrisome in developing/ under-developed economies where government spending is closely pro-cyclical to business income. In such cases profit shifting could contract government welfare spending, adversely impacting development. Hence, one of the primary objectives of

the OECD/G20 BEPS project is also to bridge this divide and “better align rights-to-tax with economic activity.”⁶

The second salient conflict that influences costs and incentives of profit shifting arises from the incongruence of earnings objectives — both the mode of return on investment and time horizon expectations between the parent and other minority shareholders of the subsidiaries. Often these subsidiaries are publicly listed independent entities. Therefore, while the MNE parent might be inclined to report lower profits for the subsidiary in a high-tax country, the expectations of other minority shareholders of the subsidiary on dividend payout and short-term earnings could be entirely at odds with such shifting.

We evaluate the incentives for profit shifting by modeling both these conflicts and associated costs.

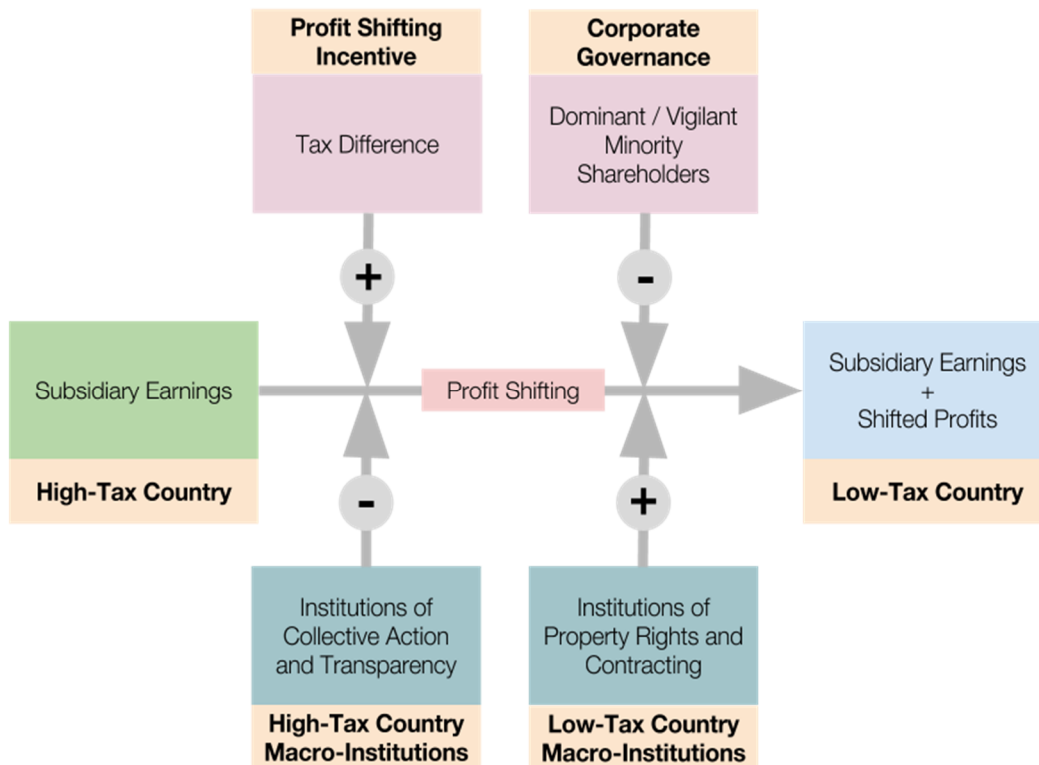
Incentives and Costs of Profit Shifting: A Simple Model and Measurement

A fundamental challenge in detecting and measuring profit shifting is to accurately tease out an estimate of tax-motivated profit shifting and disentangling it from earnings transfers driven by economic efficiency. One of the main objectives of our research is to empirically measure profit shifting from accounting information publically disclosed by companies in the annual reports. Measuring profit shifting and its economic impact is also one of the central goals of the OECD/G20-BEPS project.

At the core of our measurement approach is a simple cost-benefit model of profit shifting.⁷ We posit that while profit shifting may generate global tax arbitrage gains for the corporation, it also comes with significant costs. We argue that companies act rationally to maximize overall benefits of profit shifting net of the associated costs. In this model, inter-country tax differences generate incentives to shift profits working against broadly two kinds of costs. First, the costs associated with factors external to the firm — primarily costs imposed by the macro-institutional environment. Second, the costs imposed by internal factors — related to corporate governance and conflicting interests of other shareholders of the firm.

Figure 1 shows a simple version of the model. In this model, we argue that tax difference between the subsidiaries in high-tax and the low-tax countries is primarily incentivizing profit shifting between the two subsidiary firms. Thus, greater tax difference leads to stronger incentives and more profit shifting. The “plus” sign shows a positive, and the “minus” sign shows a negative influence of macro-institutions and corporate governance quality on profit shifting respectively.

Figure 1. A Model of Profit Shifting: Costs & Incentives

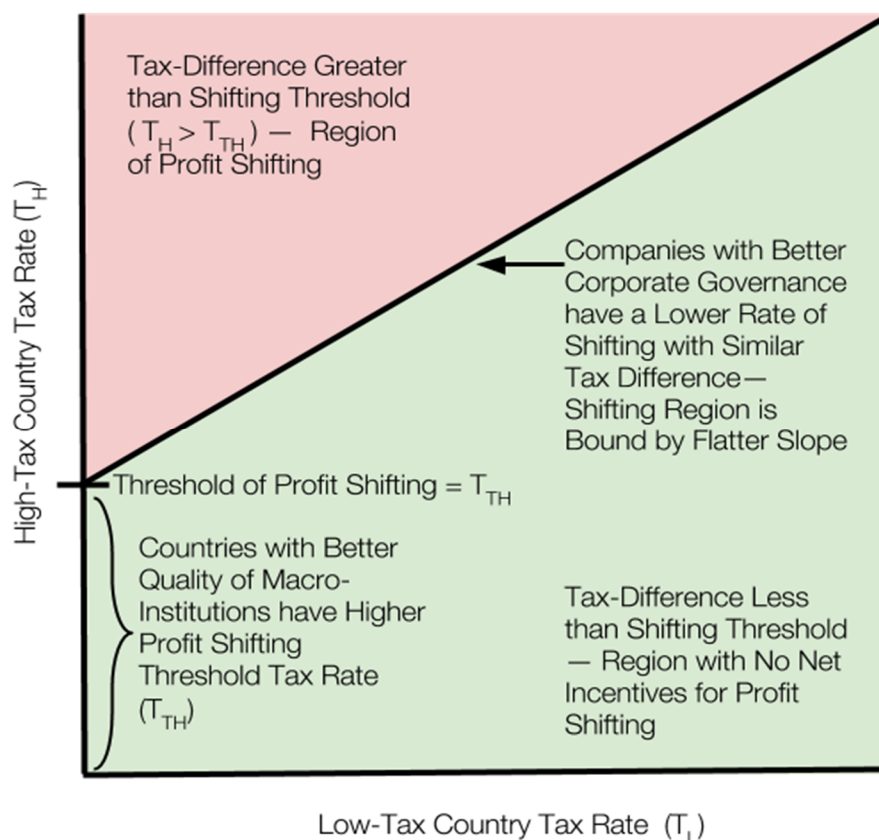


Source: Adapted from Sugathan, A., & George, R. (2015). The influence of governance infrastructure and corporate governance on profit shifting. *Journal of International Business Studies*, 46(8), 886-916.

While tax difference induces profit shifting, the net incentives to shift is positive only when the tax difference is greater than a certain threshold level — the region shaded red in Figure 2. Notably, this limit is determined by the quality of macro-institutions in the higher-tax countries that suffers tax-revenue losses due to shifting. The observation is intuitive, countries can levy higher corporate taxes without inducing profit shifting only to the extent that they have effective tax enforcements and strong institutions supporting transparency and public accountability. We expect there will be negligible incentives for profit shifting so long as the gains from shifting, net of costs incurred at circumventing the monitoring and enforcement institutions, is lower than a threshold level determined by the high-tax country's tax rates.

Additionally, the incremental proclivity to shift-profits with incremental rise in tax difference is determined by the quality of corporate governance in the company from which profits are being shifted out — represented by the steepness of slope of the boundary demarcating the two regions in Figure 2.

Figure 2. Threshold Tax Difference for Profit Shifting



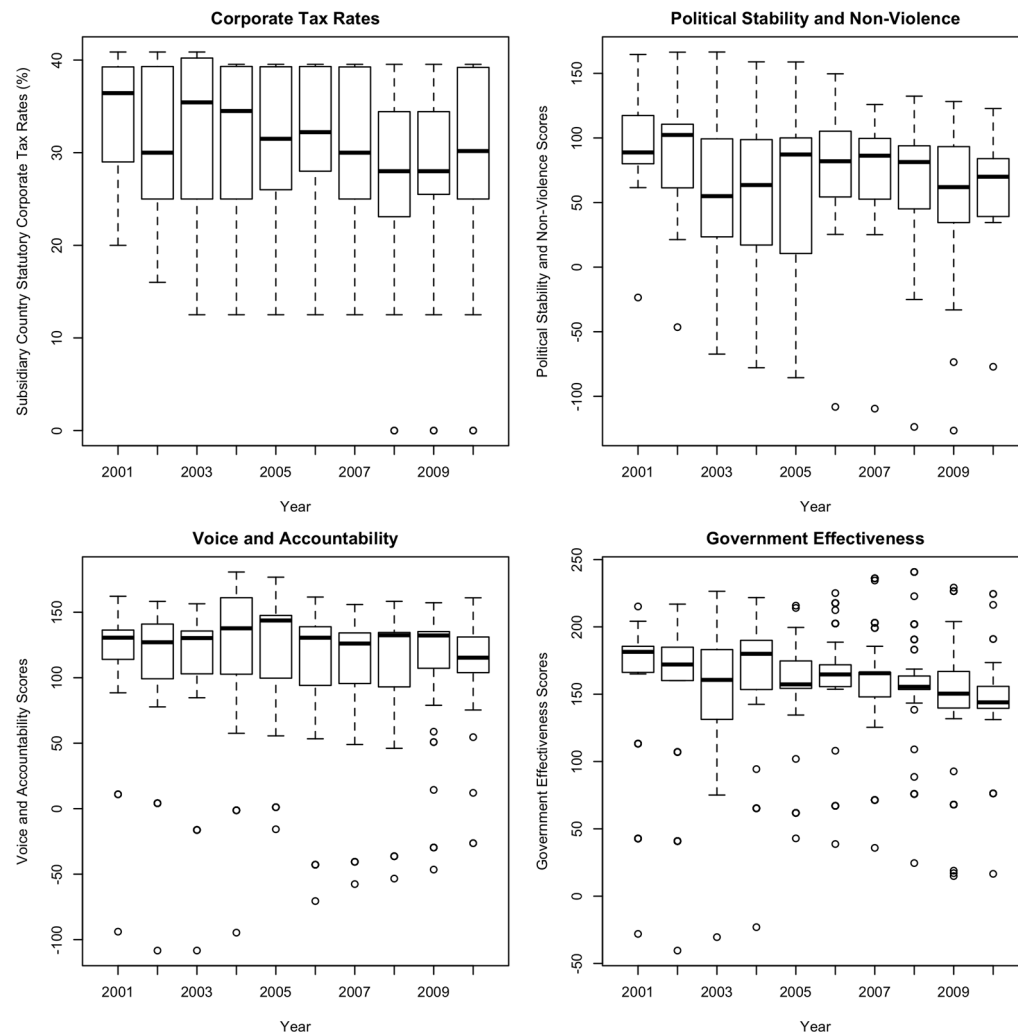
Source: Adapted from Sugathan, A., & George, R. (2015). The influence of governance infrastructure and corporate governance on profit shifting. *Journal of International Business Studies*, 46(8), 886-916.

To empirically test this model we collected publicly reported financials from more than three thousand firms over a period of 2001 to 2010 in India, which has relatively high corporate tax rates.⁸ For this period we also collected data on global corporate tax rates and two of the Worldwide Governance Indicators (WGI) compiled by World Bank (Figure 3) as a multidimensional measure of macro-institutional quality.^{9, 10}

Controlling for other explanatory factors, we check for a selective drop in earnings of the Indian subsidiary affiliated with a parent from a low-tax country, in comparison to its industry peers. We infer that this drop in earnings — statistically linked to exogenous tax-rates — is mostly due to profit shifting to the low-tax country. We identify the model parameters using an extension of an econometric technique developed earlier,^{12, 13} which statistically exploits the variations in global corporate tax-rates and macro-governance indicators for parameter identification.

The study unravels several pathways through which macro-institutional quality and corporate governance influence profit shifting. These findings provide a simple toolkit for corporate executives and policymakers to analyze their tax-policy decisions from the perspective of multiple stakeholders.

Figure 3. Distribution of World-Bank Worldwide Governance Indicators Used in the Study



Source: Compiled by authors from Kaufmann, D., Kraay, A., & Mastruzzi, M. (2010). *The worldwide governance indicators: methodology and analytical issues* (Policy Research Working Paper No.5430). World Bank.

Discussion and Conclusion

As the bedrock of economic activities, macro-institutions provide at least three foundational support functions: the protection of property rights, the

establishment of mechanisms for contract enforcement, and the enabling of collective or common action.¹⁴

The Macro-institutions facilitate efficient economic transactions between multiple actors in an economy, especially under the threat of corruption, political instability, and market friction. When information is scarce, strong and well-functioning, institutions reduce the uncertainties firms face, they bolster trust, and ease economic exchange between even mutually distrusting entities. Simultaneously, institutions also provide a recourse to limit negative externalities — or undesirable third-party spillovers — in the course of doing business.

Contrary to popular perception that stronger institutions would in general desist profit shifting, our analysis shows that stronger macro-institutions in the low-tax countries — typically the recipients of the shifted profits from elsewhere— encourages profit shifting. This empirically regularity has an intuitive explanation: while deciding on the destination for shifted profits, companies are not only swayed by how lucrative the tax-arbitrage is, they are also concerned if the shifted profits are safe and easy to transact with. In our data sample we see that that improvements in perceptual measures of low-tax country government effectiveness, political stability and non-violence increases shifting activity — these are indicators of secure property rights and contracting efficiency. Therefore we find that better quality institutions ensuring secure property rights and contract enforcement in the recipient country would lower the costs of transactions and facilitate profit shifting.

In contrast, in the high-tax country (the party at loss of tax revenues), the institutions dissuading and limiting negative externalities of business activities are likely to increase the costs of shifting transactions. In particular, we observe that perceptual measures of transparency and public accountability significantly raises the costs of profit shifting activities.

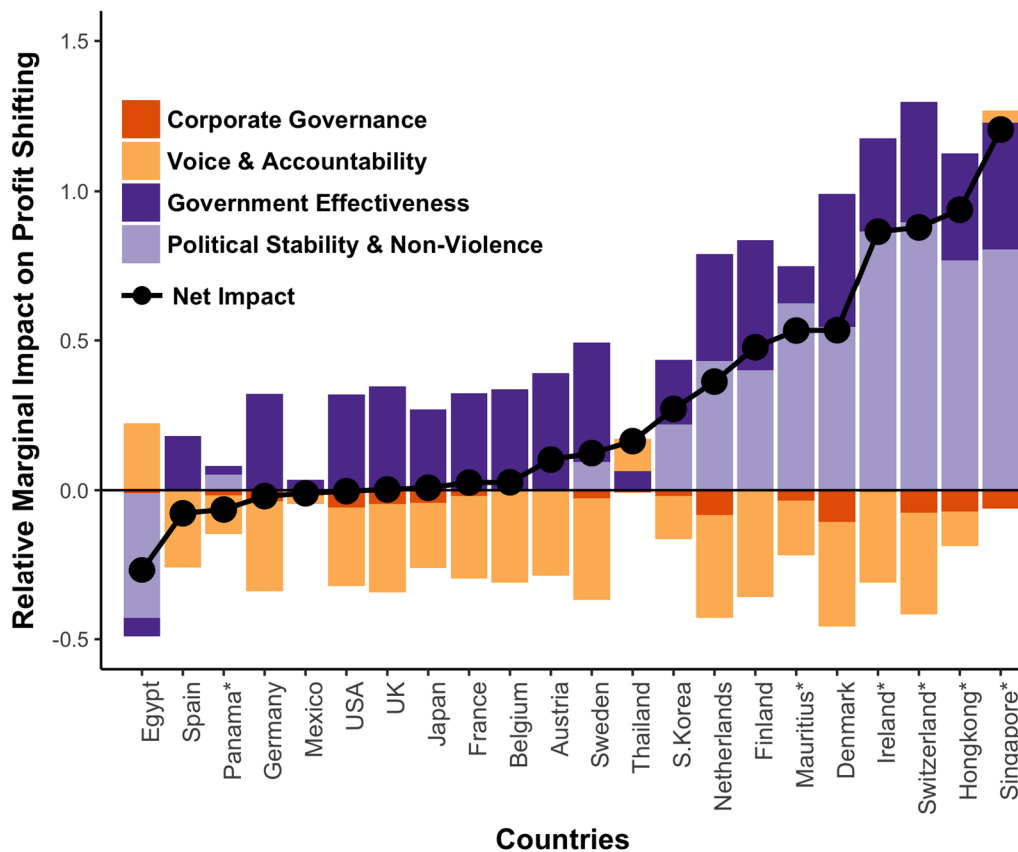
Figure 4 shows how these dimensions of macro institutions in the low-tax countries impact profit shifting in two opposing ways. Additionally as one would expect, corporate governance shows a deterring impact on profit shifting. In this study, corporate governance quality is proxied by the presence of dominant minority shareholders like large institutional investors.

In conclusion we highlight one key takeaway each for the minority shareholder, company executive and the policy maker.

From the perspective of minority shareholders, if profit shifting is at odds with their financial objectives, they should seek out companies with a reputation for good corporate governance or where large institutional investors are actively scrutinizing the company P&L. For the practitioner, we

highlight the underlying macro-institutional forces at work using a simple applied framework. The analysis shows that despite planning for tax-optimization at a company level, the macro-institutions in the operating countries can significantly determine eventual outcomes in terms of how much net shareholder value is created by tax-planning using profit shifting structures. Finally from a policy maker's perspective, the study highlights how institutions that engender transparency and public scrutiny can significantly boost their existing tax enforcement arsenal. Conversely, the efficacy of tax enforcement is enhanced with greater transparency.

Figure 4. Relative Marginal Impact of Macro-Institutions and Corporate Governance on Profit Shifting



*Countries classified as Tax-Haven in Dharmapala, D., & Hines Jr., J.R. (2009). Which countries become tax havens? *Journal of Public Economics*, 93(9-10), 1058-1068. Countries ordered in ascending order by the net impact of their institutional and corporate governance scores on profit shifting.

Source: Computed from authors' prior work in: Sugathan, A., & George, R. (2015). The influence of governance infrastructure and corporate governance on profit shifting. *Journal of International Business Studies*, 46(8), 886-916.

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Endnotes

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10. The WGI measures are based on perception surveys. Hence, they are *de-facto* indicators of the quality of macro-institutions as opposed to *de jure* measures that are based on the state of underlying legal structure, for instance: the Creditor Rights index developed in Note 11.
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