

Trinidad and Tobago: Policy Proposals for Subsidy Reform for Environmental and Welfare Gains in an Institutionally Constrained Environment

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Executive Summary

The distortionary effects of consumer energy and transportation subsidies have resulted in environmental issues on the island related to overconsumption and inefficient resource allocation. Despite the often cited re-distributive justice justification for these subsidies it is found that the reduced costs of energy intensive goods and services disproportionately benefits higher income individuals, who consume higher energy goods on average. Instead the primary justification for these consumer subsidies appears to be political, as subsidies are one of the most politically visible welfare policies that also require some of the lowest government overhead to administer. It is proposed that the prevalence of these subsidies is indicative of systemic issues present in the nation such as a lack of institutional legitimacy and a lack of institutional potential on behalf of policy makers.

As addressing these systemic issues is outside the scope of this brief, a gradual reduction in consumer subsidies is proposed and justified based on economic concerns driven by low global energy prices and reduced government revenue. If possible this subsidy reduction should be accompanied by a direct cash transfer to low income groups most affected by its removal. The main conclusion of the brief however is that the removal of consumer subsidies are necessary to reduce over consumption of resources domestically and the environmental impacts that it causes. Despite the benefits of the proposed policy however, unless systemic changes are adopted, the country's dependence on dwindling viable petroleum reserves and lack of institutional legitimacy will continue to be a barrier to any substantive policy reform.

Introduction

Trinidad and Tobago is a unique Small Island Developing State in that it has the 2nd highest CO₂ emissions per capita as well as various environmental issues such as city congestion, decreased air quality in urban areas as well as other related health issues (Levy, Buonocore & von Stackelberg, 2010) relating to an overabundance of personal cars given the island's size (Ramdass, 2020). These environmental issues are caused by inefficiency and over consumption, core characteristics of the domestic economy in large part due to the distortionary market effects of the various subsidy programs that have been implemented since 1974. Energy and transportation subsidies, both applied to producers and consumers, have created an economy that downplays efficient uses of resources, leading to over-consumption and its negative externalities (economic and environmental). As such, the removal/phase out of consumer subsidies in the domestic energy and transportation sectors should lead to a reduction of the over-consumption and inefficient uses of resources.

This policy brief, intended for local policy makers describes the pros and cons of these subsidies and comparable alternate policies. It describes the economic and political context of the island and why this context has made subsidy reform difficult. It will also provide a roadmap for implementing reform in a manner that incorporates the fundamental challenge with policy reform in Trinidad and Tobago - a lack of public faith in institutions and a resulting lack of institutional/regulatory capacity for politicians and policy makers.

Background

A critical component to understanding policy making in Trinidad and Tobago is to understand its relatively unique role as a net energy exporter. Being both an island nation and a net energy exporter of fossil fuels (Energy Information Administration, 2021) has in large part dictated its economic policy since at least the 1970s:

Fossil Fuels and their Implications for Economic Policies

Development of the countries' fossil fuel reserves has been and will continue to be at the core of economic decision making. One of the most long-standing policies to this end has been the producer subsidies that reduce the cost of operation for oil and gas producers. These subsidies usually took the form of preferential tax treatment, no interest loans or petroleum exploration grants and generous royalty payment structures.

While these subsidies were at the core of developing the country's fledgling petroleum industry, they have persisted as the industry matured due to the increased costs of exploration and extraction of reserves located in increasingly higher risk/cost locations (Scobie, 2017). These subsidies have been deemed integral to the maintenance and continued development of the mature petroleum sector and far from a demand to remove them, there is a broad consensus that they should be increased (Scobie, 2017).

The second relevance of the country's petroleum industry is its position as an energy exporter. This is important to our discussion of subsidies as this means that national revenue is directly tied to global energy prices. When global energy prices are high, unlike energy importers, the country gains more revenue as it is able to sell its petroleum products at high prices and vice versa when global energy prices are low (Moor, 2009). This, combined with the inherently cyclical nature of global energy markets

(Křehlík & Baruník, 2017) means that there are clear periods where economic and budgetary concerns can be used to justify subsidy reform to the electorate and to policy makers (Scobie, 2017).

Most developing countries, even more so island nations, prefer an environment where global energy prices are low, as they are able to purchase natural gas and other energy commodities at lower prices, reducing government expenditures/deficit spending and leaving revenue for other government operations (Scobie, 2017). Island Developing States are particularly vulnerable to high global energy prices due to their strict dependence on imported fossil fuels for energy security (Raghoo et al., 2018). Trinidad and Tobago's plentiful petroleum reserves, however, have made it a strict energy exporter. The higher the global energy prices the more government revenue it is able to generate. This fossil fuel wealth, combined with historical periods of very high global energy prices has resulted in the island having the 3rd highest income per capita in the Americas (behind the US and Canada) in 2018. This historically high level of government revenue, combined with the country's high access to international credit due to resource based financing (Weinman, 2019) has led to the expansion of the state apparatus into many government services such as public education (up to tertiary level), healthcare, social security and several other "pro-poor social service mechanisms" (Scobie, 2017). This concentration of petroleum revenue however has come at the cost of economic diversification. The country's dependence on its petroleum sector creates a volatility in government revenue that is not conducive to stable political institutions and social programs. This has created systemic issues that have far reaching impacts, further discussed below.

Re-Distributive Justice and its use in Subsidy Justification

While the justification for subsidy programs on the producer's side has been an economic one: the development and maintenance of the petroleum sector, consumer subsidy programs have been justified on the ground of "re-distributive justice" (Scobie, 2017). The main argument for consumer power and transport subsidies is that it is a method of re-distributing national income generated by the country's petroleum sector towards the citizenry, particularly lower-income groups (*Petroleum Production Levy and*

Subsidy Act, 1974). By reducing transportation and power costs the citizenry are able to benefit from the country's energy wealth by enjoying a lower cost of living relative to its level of industrialization (Scobie, 2017). This inherently frames the discussion of subsidy reform as a conflict between economic and moral arguments. Traditionally moral and political arguments trump economic concerns as subsidies are some of the most visible forms of welfare spending, making them very popular with electorates (Victor, 2009). Subsequently, because of their widespread nature any reduction in these subsidies would have spillover effects throughout the economy, prompting heavy backlash (Victor, 2009).

The Conflict between Re-Distributive Justice and Economic Concerns

The tension between the economic and justice concerns has favored the maintenance of the current subsidy regime as a form of welfare due to its visibility to the public and the low government overhead required to administer the program. These are key elements of a successful policy in the context of a country where policy makers have low institutional capacity (Scobie, 2017). Economic, mainly budgetary concerns, however, can come to the forefront of political discussion during extended periods of low global energy prices. During these periods the government is forced to increase deficit spending to maintain these subsidy programs as national income from the petroleum sector decreases (Scobie, 2017). This increased deficit spending and the negative economic consequences accompanying it make arguments about the economic inefficiency of subsidies as a welfare policy more salient to politicians and their electorate (Scobie, 2017). Energy and transport subsidies are argued to be an inefficient method of re-distributing wealth to the poor (Vagliasindi, 2013) and in many cases they result in regressive outcomes as low energy prices disproportionately benefit upper income groups that consume higher energy products and services (Vagliasindi, 2013). As described above these issues are less salient when global energy prices are high "Governments often use subsidies to secure temporary political survival even when they threaten medium term government revenue" (Scobie, 2017) however this strategy becomes less and less tenable the worse the economic situation becomes.

Institutional Legitimacy and its Implications for Policy Making

It is important to note that the reforms proposed in this policy brief are done so in a manner that works around the fundamental issues that stifle political reform. Public faith in government institutions has been eroded over time due to widespread corruption and an inability to control persistent social problems in the country such as violent crime (Kirton, Anatol & Braithwaite, 2010). A plurality of citizens report they do not have faith in the government's ability to govern with their interests in mind and the general perception of the government by the public is one of a corrupt, inefficient bureaucracy (Kirton, Anatol & Braithwaite, 2010). Independent of the accuracy, this perception by the public severely limits the ability of policy makers to enact reforms. In this environment a government is unable to commit to long term policy goals and must prioritize shorter-term strategies that secure their political position first, even if this comes at the cost of potential long term gains (Scobie, 2017).

This lack of effective bureaucracy and high levels of corruption further limits the efficacy of policy makers as they are only able to focus on initiatives that have a low level of government involvement and require little or no overhead to operate effectively (Scobie, 2017). This is yet another reason why consumer subsidy programs have been favored by politicians. Their public visibility combined with the low level of overhead required to administer the program makes the policy uniquely suited to situations where governments lack institutional capacity (Scobie, 2017).

Policy Options

Given the limitations of the policy environment described previously there are several characteristics that a proposed policy must have in order to be viable. They are as follows:

- Be politically visible enough so as to benefit the political party that enacts it
- Require a low level of government overhead to be maintained in order to weather government inefficiencies and corruption.
- Provide a sufficient form of wealth redistribution to lower income groups in order to satisfy the public demand for re-distributive justice.
- Be more economically efficient than the existing subsidy framework in order to survive the increase in economic and budgetary concerns that arise as a result of falling global energy prices and a mature oil and gas economy.

The current subsidy framework obviously meets the first two requirements. Normally, there would be many proposed policy replacements to these consumer subsidies such as an equivalent investment in public health and education services (Simon, 2012), the creation of public healthcare programs or other social services such as pensions or unemployment insurance frameworks (Simon, 2012). The issue with these solutions are that, for the most part, these forms of welfare programs already exist in the country and are relatively well funded (Scobie, 2017). The issue with these social services again is not funding, it is the lack of institutional capacity due to previously described fundamental issues with the public sector such as bureaucratic inefficiencies and corruption.

There is only one policy option that meets all four criteria described above and that is a direct cash transfer to low-income groups (Hesham AlShehabi, 2012) (Vagliasindi, 2013). A direct income payment or equivalent tax credit equal to the current wealth transfers (Vagliasindi, 2013) that are currently indirectly achieved by the subsidy program meets all of the qualifications previously set for a successful policy. A direct cash transfer to only low income groups satisfies the public's desire for re-distributive

justice while at the same time removing the distortionary effects of the subsidy program that lead to an over consumption of energy and private vehicles. This policy results in savings for the government as it is a form of price discrimination - the consumption of higher income groups that can afford to pay more is no longer subsidized by the government, while lower income groups continue to receive the same level of government assistance. This results in re-distributive justice at a reduced cost. The removal of these distortionary effects would lead to a re-prioritization of efficiency and a reduction of over-consumption in the domestic economy. This re-incentivisation of efficiency would lead to diversification in domestic energy production away from fossil fuels into more renewable energy sources.

While this policy brief recommends the replacement of the consumer subsidy regime with a direct cash transfer, the brief recommends it is done piece-meal over a long time-frame. While this is not ideal, as addressing the environmental issues caused by domestic over consumption should be a priority, these subsidies have been deeply embedded in the political landscape of the country and as described previously the main critiques of subsidies - economic concerns, are only palatable to the public and policy makers during times of reduced national income due to low global energy prices (Scobie, 2017). Fortunately, as global commodity prices are inherently cyclical (Křehlík & Baruník, 2017) this gives willing policy makers a reoccurring window in which small changes to the subsidy regime are electorally popular. Currently global energy markets are at historic lows which, in conjunction with increased deficit spending brought on by COVID-19 has once again made subsidy reform a core issue (International Monetary Fund, 2021). Small scale changes should be pushed for during these periods of low global energy prices - consumer subsidies should be reduced and equivalent direct-cash transfers for low-income groups should be set up/expanded. When global energy prices rise and economic concerns for subsidy reform become no longer politically palatable then the issue should be left alone until the next fall in energy prices. This is the proposed framework of this policy brief and if followed, should lead to a reform of the domestic economy's energy and transport sectors.

Conclusion with Future Implications and Recommendations

In conclusion the limiting factors of the political and economic reality of the country have made direct-cash transfers to low income groups the only appropriate policy alternative to the existing subsidy framework. While the implications for economically efficient welfare is a strong contributing factor to the proposal to remove said subsidies, it is not the primary one. The primary reason for this brief's recommendation to remove the energy and transport subsidies on the consumer side is the removal of the distortionary effects these subsidies have on the domestic economy. In fact, had no alternate policy proposals met the four requirements outlined earlier in the brief, the concluding recommendation would have been a slow phase out of the subsidy program regardless. This is for two primary reasons: Firstly, independent of any re-distributive justice arguments the subsidies not only reinforce the country's dependence on its petroleum sector, they actively discourage any attempt at economic or energy diversification. The artificially low prices of energy on this island makes any renewable energy project unprofitable and difficult to justify on any grounds (Scobie, 2017). Environmental concerns such as Greenhouse Gas emission reduction or pollution control are not politically attractive issues due to the over-consumption that the reduced costs of goods and services and energy incentivise (Solaun et al., 2015).

Secondly, and perhaps more critically for policy implementation, the subsidy program is becoming/has become economically untenable. The dynamic of global energy markets has changed significantly since the implementation of the subsidy program. The fracking revolution in the US and its new presence as a net energy exporter has driven down the global price of natural gas independent of cyclical trends (Melikoglu, 2014). In addition, Trinidad's petroleum industry is very mature. This means that any increase in extraction and production requires the use of reserves located further and further offshore, increasing the risks and costs of operations and subsequently the costs of government production subsidies required to attract foreign investment (Scobie, 2017). This increase of government revenue towards production

subsidies and continuing decrease of reserves is not compatible with the current and projected future global energy market (Melikoglu, 2014). Increasing deficit spending and a lack of a counter-cyclical global energy price increase has led to an interest in decreasing subsidies that traditionally would have not have survived the concerns of re-distributive justice (Scobie, 2017).

Moving forward, even as the likelihood of subsidy reform becomes more popular due to economic pressures it is important to highlight the broader context that has led to the current issues with the subsidy regime as well as the limited realistic recommendations present in this policy brief. The lack of institutional capacity of policy makers, as well as the lack of public faith in national institutions have been described previously as core issues within the country preventing reform and with good reason. The lack of policy initiatives taken to diversify the economy away from its petroleum sector during periods of high global energy prices has culminated in a dire economic forecast as a country with depleting economically viable reserves is forced to redirect a growing share of its falling national income towards production oriented subsidies to maintain/expand production of petroleum products even in an noncompetitive global market (Scobie, 2017). The inability of deficit spending to compensate for falling oil prices, bureaucratic inefficiencies and corruption was highlighted when in 2018 the government was forced to close its national oil refinery Petrotrin (Ramdass, 2018). This marked the end of oil refining, a staple on the island for the last 100 years, making national revenue almost exclusively dependent on natural gas exports and its derivatives such as ammonia (Ramdass, 2018). The main reasons cited for the closure of the refinery were a lack of profitability due to mismanagement, low oil prices, the unsustainability of its corporate debt and corruption (Ramdass, 2018) - emblematic of issues afflicting all national institutions.

While the brief's recommendations towards subsidy reform as a way of addressing the environmental issues present in the domestic economy is a valid one in the short term, in the long term large scale political reforms are necessary to overcome the systemic issues that define the country. Unless large scale reforms aimed at diversifying the country's export mix and restoring institutional legitimacy are

undertaken, these systemic issues will remain as barriers to economic development and environmental security that no significant policy recommendation will be able to overcome.

Work Cited

- Energy Information Administration. (2021). International - U.S. Energy Information Administration (EIA). Retrieved 29 November 2021, from <https://www.eia.gov/international/analysis/country/TTO>
- Hesham AlShehabi, O. (2012). Energy and labour reform: Evidence from Iran. *Journal Of Policy Modeling*, 34(3), 441-459. doi: 10.1016/j.jpolmod.2011.09.003
- International Monetary Fund. (2021). Trinidad and Tobago: Staff Concluding Statement of the 2021 Article IV Mission. Retrieved 29 November 2021, from <https://www.imf.org/en/News/Articles/2021/11/19/trinidad-and-tobago-staff-concluding-statement-of-the-2021-article-iv-mission>
- Kirton, R., Anatol, M., & Braithwaite, N. (2010). The Political Culture of Democracy in Trinidad & Tobago. Institute of International Relations. Retrieved from <https://www.vanderbilt.edu/lapop/trinidad-tobago/2010-political-culture.pdf>
- Křehlík, T., & Baruník, J. (2017). Cyclical properties of supply-side and demand-side shocks in oil-based commodity markets. *Energy Economics*, 65, 208-218. doi: 10.1016/j.eneco.2017.05.003
- Levy, J., Buonocore, J., & von Stackelberg, K. (2010). Evaluation of the public health impacts of traffic congestion: a health risk assessment. *Environmental Health*, 9(1). doi: 10.1186/1476-069x-9-65
- Melikoglu, M. (2014). Shale gas: Analysis of its role in the global energy market. *Renewable And Sustainable Energy Reviews*, 37, 460-468. doi: 10.1016/j.rser.2014.05.002
- Moor, A. (2009). Towards a grand deal on subsidies and climate change. *Natural Resources Forum*, 25(2), 167-176. doi: 10.1111/j.1477-8947.2001.tb00758.x

Raghoo, P., Surroop, D., Wolf, F., Leal Filho, W., Jeetah, P., & Delakowitz, B. (2018). Dimensions of energy security in Small Island Developing States. *Utilities Policy*, 53, 94-101. doi: 10.1016/j.jup.2018.06.007

Ramdass, A. (2020). 1.1 million vehicles on the roads of T&T?. Retrieved 29 November 2021, from https://trinidadexpress.com/newsextra/1-1-million-vehicles-on-the-roads-of-t-t/article_32091ecc-19d3-11eb-b0ab-5f6fa6699481.html

Ramdass, N. (2018). Petrotrin's refinery shutdown explained (and why it was done) | Loop Trinidad & Tobago. Retrieved 30 November 2021, from <https://tt.loopnews.com/content/petrotrins-refinery-shutdown-explained-and-why-it-was-done>

Scobie, M. (2017). Fossil fuel reform in developing states: The case of Trinidad and Tobago, a petroleum producing small Island developing State. *Energy Policy*, 104, 265-273. doi: 10.1016/j.enpol.2017.02.008

Simon, C. (2012). A Guide to the Political Economy of Reforming Energy Subsidies. Bonn: Institute for the Study of Labor. Retrieved from <https://www.econstor.eu/handle/10419/91797>

Solaun, K., Gómez, I., Larrea, I., Sopelana, A., Ares, Z., Blyth, A., & CO, F. (2015). Strategy for Reduction of Emissions in Trinidad and Tobago, 2040. Action Plan Mitig. GHG Emiss. Electr. Power Gener., Transp. Ind. Sect., GORTT, 146.

The Guardian. (2020). T&T 2nd worldwide for CO2 emissions. Retrieved 29 November 2021, from <https://www.guardian.co.tt/news/tt-2nd-worldwide-for-co2-emissions-6.2.1049334.ef17fb4ea8>

Trinidad and Tobago. Petroleum Production Levy and Subsidy Act (1974). Trinidad and Tobago.

Vagliasindi, M. (2013). Implementing energy subsidy reforms. Washington, DC: World Bank.

Victor, D. (2009). The Politics of Fossil-Fuel Subsidies. SSRN Electronic Journal. doi:
10.2139/ssrn.1520984

Weinman, A. (2019). Trinidad Petroleum secures new bank loans as bond repayment looms. Retrieved 30
November 2021, from <https://www.reuters.com/article/petrotrin-loans-idUSL1N20Z0LS>