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The advice represents the preliminary views of the Secretariat and does not necessarily represent the views of the Group or the Government.

Coversheet: **Financial Transaction Taxes**

Discussion Paper for Session 11 of the Tax Working Group
15 June 2018

Purpose of discussion

This paper outlines the main arguments for and against a financial transaction tax (FTT). The paper is intended to facilitate discussion between members of the Group about whether an FTT would be desirable in New Zealand. This is initial advice on the arguments for and against FTTs in general. This paper does not go into the specific issues for different types of FTTs.

Key points for discussion

- What, if any, additional analysis does the Group wish to have on financial transaction taxes (noting the resource and timing constraints leading up to the Interim Report)?

- How does the Group wish to deal with this issue in the Interim Report?

Recommended actions

We recommend that you:

a **note** that the Secretariat does not support financial transaction taxes.

b **indicate** what, if any, additional analysis the Group would like to see on financial transaction taxes.

c **indicate** what, if anything, the Group would like to say about financial transaction taxes in the interim report.

Financial Transaction Taxes

Discussion Paper for Session 11
of the Tax Working Group

June 2018

Prepared by the Inland Revenue Department and the Treasury

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Executive Summary

The purpose of this paper is to explain the general effects of a tax on financial transactions. A financial transaction tax (FTT) can refer to a wide variety of taxes on different types of financial products, including securities, derivatives, and currency. This paper does not deal with the specific design issues of each type of FTT, which would involve a high degree of complexity and detail. Rather, the paper focuses on the general arguments for and against an FTT.

An FTT is seen by its proponents as a way to discourage speculative and unproductive trading, which would improve stability in financial markets and raise revenue in a simple way from a sector that some see as undertaxed. Those opposed to an FTT think that the tax is unlikely to improve stability in financial markets, that it would introduce distortions with economic costs, and that there are more economically efficient ways of gathering revenue.

There is general agreement that by introducing additional transaction costs, an FTT would make a number of short-term transactions that currently take place uneconomical. This would reduce the overall volume of trading with a resulting negative impact on market liquidity and on the ability of financial markets to operate efficiently.

A reduction in financial market efficiency would, in and of itself, lead to an increase in market volatility. However, the overall effect on market stability would depend on the extent to which an FTT also reduced the volume of any speculative 'volatility-increasing' trading. The limited international empirical evidence shows overall neutral or negative effects on market volatility.

The revenue that could be raised by an FTT in New Zealand is likely limited due to the ease with which it could be avoided. This is because of the proximity of New Zealand to the Australian financial markets.

However, to the extent that relocation of financial activity occurs, it could potentially reduce the negative impacts that an FTT would have on liquidity, volatility and efficiency. This is because, any relocation will mean that the same financial transactions occur, just utilising a different marketplace. However, it would also have negative implications for the size of domestic capital markets.

The economic incidence of the tax is unclear.

The Secretariat recommends against implementing a FTT in New Zealand, primarily due to the likely inefficiency of transaction taxes, the risk of substantial avoidance and the likely reduction in liquidity in the New Zealand financial markets.

1. Introduction

1.1 Purpose

1. The Tax Working Group (the Group) has requested advice on financial transaction taxes (FTT). This paper explains what the impacts of a tax on financial transactions would be and examines the use of these taxes globally.

1.2 Content and scope

2. This paper advises on the expected impacts of an FTT. An FTT can target a number of different transactions, such as securities trading, currency trading (Tobin tax), and derivatives trading. However, the arguments for and against an FTT are relatively consistent, no matter what form of trading the tax is designed to capture. As a result, this paper only considers the main arguments for and against an FTT and does not cover specific design issues.

3. This paper looks at the expected impact of an FTT on the amount of trading, market liquidity, the volatility of prices, and fairness. This paper also assesses the revenue potential of an FTT in New Zealand.

4. This paper does not address the taxation of financial services. That topic is covered in a separate paper titled *Taxing Financial Services*.

2. Analysis

2.1 Context

5. A financial transaction tax (FTT) is a tax on the purchase, sale, or transfer of financial instruments. An FTT is usually levied as a small percentage of the nominal value of the transaction, but could in theory also be imposed as a flat fee per trade. An FTT can be limited in scope to transactions that involve securities (such as shares, bonds, and derivatives), or can have a wider scope, so as to include currency trading (also called a Tobin Tax) or bank transactions (deposits or withdrawals). An FTT could also be limited in scope to transactions on a secondary market, or it could include the original issue of a security (such as an initial public offering for a share).

2.2 Core arguments

6. Proponents of an FTT, including some submitters to the Group, believe that it would be a simple way to raise revenue from a sector that some see as undertaxed.[1] Proponents of this tax also believe that it would curb speculative trading and reduce volatility in financial markets (Stiglitz, 1989). The core arguments that are made by those in favour of an FTT are that:
    - It could, in theory, improve market stability by reducing the incentive to make speculative short-term trades.
    - It would likely be an administratively simple way of raising a significant amount of revenue.
    - It could improve the vertical equity of the tax system, because the incidence of the tax could fall on the financial sector and those with high levels of income/wealth.

7. Opponents, including other submitters to the Group, argue that an FTT would be an inefficient way of raising revenue, and that the distortionary effect of the tax on financial markets would outweigh any benefits (Matheson, 2011). The core arguments that are made by those opposed to an FTT are that:
    - It would reduce market liquidity by reducing the volume of trading in affected financial markets.
    - The loss of liquidity would make it harder for financial markets to function efficiently. This could lead to greater market volatility.
    - The increase in transaction costs would increase the rate of return required by investors, which could lead to lower asset prices and a higher cost of capital.
    - The ability for New Zealand to generate significant revenue from an FTT could be limited, due to the ease with which a FTT could be avoided.
    - An FTT would be a particularly inefficient way of raising revenue due to the fact that it cascades.

[1] The lack of GST on financial services does support the argument that the financial sector in New Zealand may be undertaxed. This topic is covered in a separate paper, *Taxing Financial Services*.

- The economic cost of the tax will be borne largely by savers due to lower rates of returns and reduced asset prices, and by a mix of owners of capital and workers due to a higher cost of capital.

8. At the heart of the disagreement is whether the distortionary behaviour effects of an FTT are a positive or negative outcome. Those in favour of an FTT believe that a reduction in the number of trades would reduce volatility in financial markets, while those opposed to an FTT argue that the reduction in the volume of transactions would make it harder for markets to operate efficiently.

9. The following section will assess:

    - the impact of an FTT on the number of trades occurring in the market and what impact this has on market liquidity;
    - how market volatility might be impacted by an FTT;
    - the revenue potential of an FTT;
    - the economic efficiency of an FTT; and
    - the distributional impact of an FTT.

2.3 Impact on trading volume

10. There is general agreement in the literature that an FTT would reduce the number of trades. The increase in transaction costs would make some proportion of current transactions unprofitable, so these transactions would not occur in a market where the FTT was levied (Burman et al., 2016). Empirical analysis of FTTs imposed in Sweden (Campbell & Froot, 1994) and France (Gomber, Haferkorn & Zimmermann, 2016) both show significant reductions in the trading volume of financial instruments that were subject to each country's FTT.

2.4 Impact on market liquidity

11. Market liquidity generally refers to the speed at which a financial instrument can be bought or sold. A market with high liquidity would be one where an individual could buy or sell a large amount of an asset without resulting in a significant impact on the price (Burman et al., 2016). We would also expect a market with high liquidity to be one with a low bid-ask spread (the difference between how much it costs to purchase and sell an asset).

12. Having the ability to quickly and easily buy or sell a financial instrument is an important component of financial markets. Liquidity is valued by investors in financial products, as they will generally demand a higher rate of return from assets with low liquidity (Amihud & Mendelson, 1986). Even for those investors that purchase securities with the intention of holding them for a long period of time, the fact that they can quickly exit the market if necessary is still a substantial benefit.

13. By imposing additional transaction costs and reducing trading volume, we would expect an FTT to have a negative impact on market liquidity. Empirical evidence relating to the New York state FTT indicates that an increase in the rate of an FTT does increase the size of the bid-ask spread (Pomeranets & Weaver, 2018). If an FTT does reduce market liquidity, we would expect investors to place less value on those affected products, reducing their value and theoretically leading to higher costs of capital in the long run (Meyer, Wagener & Weinhardt, 2015).

14. There are some specific financial markets in New Zealand that play an important stabilising role for our economy. These are:
    - the currency market (i.e. New Zealand dollar);
    - the interest-rate swap market (where, for example, New Zealand banks offset their exposure to interest rate risk arising from their mortgage lending); and
    - the derivatives market (where market participants hedge exposure to New Zealand dollar risk, interest rate risk, and default risk).

15. While these markets are currently relatively liquid and efficient, an FTT on these markets could threaten this liquidity and negatively impact the ability of these markets to be effective 'shock absorbers' for New Zealand. This is because foreign participants in these markets have a number of foreign markets available as alternatives to trading in New Zealand. An FTT would arguably increase the costs facing participants in these markets, which could discourage participation.

16. Some countries with FTTs have attempted to mitigate the negative liquidity impacts by providing exemptions for certain parts of the financial sector. The French FTT, for example, provides an exemption for 'market-makers' (professional liquidity providers). This measure did not, however, prevent the FTT from negatively impacting market liquidity (Gomber et al, 2016), as those in the business of supplying liquidity still reduced their activity in response to the tax, despite the exemption (Meyer et al., 2015). These exemptions could also be viewed as loopholes in the tax; recent FTT proposals, for example from the European Commission (2013), have included market-makers within the taxable base.

2.5 Impact on market volatility

17. One of the core arguments put forward by proponents of an FTT is that it would reduce market volatility and lower the probability of an economic crisis. Proponents believe it would achieve these goals by reducing the amount of 'speculative' trading in the market (Stiglitz, 1989). The theory is that a significant number of trades add little value and are simply 'noise' that introduce additional volatility to prices and make it harder for markets to function efficiently. By imposing higher transaction costs, an FTT would remove some of the incentive to make short-term speculative trades, which would reduce price instability in financial markets.

18. Officials expect an FTT would lengthen the average period over which assets are held, as investors switch from short-term transactions to more long-term ones. This is because an FTT will impose a greater cost on assets that are more frequently traded.

19. It is unclear whether the transactions discouraged by an FTT are actually harmful to the market. Some short-term trades may be unproductive and are made by uninformed investors (Stiglitz, 1989). These are not economically beneficial in and of themselves. Some in favour of an FTT believe that the positive effect of curbing speculation could outweigh the costs associated with reduced liquidity or increased costs of capital that result from taxing financial transactions (Summers & Summers, 1989). Yet many short-term transactions can be productive, because they help in the process of price discovery. Price discovery helps to quickly incorporate new information into the price of an asset and allows investors to be more informed when making investment decisions. The possibility for people to buy when they think that prices are low and sell when they think they are high can help in discovering true values. Prices could become more volatile if an FTT reduces the volume of informed trades.

20. Short-term transactions are also productive when they provide necessary liquidity to the market (Burman et al., 2016). Long-term investment is often difficult in a market with no short-term investors, as thinner markets make buying and selling more difficult. New Zealand's financial markets are already experiencing declining liquidity (Kendall, 2016). The reduced liquidity caused by an FTT could magnify this issue. This is because a market with excess liquidity can afford to lose a proportion of its trades without significant negative efficiency impacts , compared to markets with lower liquidity.

21. The drawback of an FTT is that it cannot differentiate between economically efficient short-term trades and those that simply introduce noise into the market (Matheson, 2011). If an FTT discourages enough economically beneficial short-term transactions, such that price discovery is less efficient and there is less liquidity in the market, we would expect volatility to increase. The theoretical impact of an FTT on market volatility is therefore unclear.

22. Most empirical evidence suggests that imposing additional transaction costs on financial markets either has *no* impact on price volatility,[2] or leads to an *increase* in price volatility.[3] While there is limited empirical evidence that some forms of transaction costs can actually reduce market volatility,[4] the balance of the literature indicates that, in practice, FTTs remove too much productive short-term trading to be able to achieve its aim of reducing market volatility.

23. There is an argument that an FTT could reduce the likelihood of an economic crisis. There is, however, little research on this relationship (Matheson, 2012). A global FTT, or an FTT applying to a major hub of financial transactions, might have the potential

[2] Recent studies of a new FTT on securities established by France in 2012 showed that the introduction had no significant effect on volatility (Gomber et al., 2016, Colliard & Hoffmann, 2017). This is a similar result to that found by a comprehensive study of the relationship between transaction costs and volatility across 23 countries (Roll, 1989).

[3] For example, a tax on securities transactions in Sweden lead to a significant increase in volatility (Umlauf, 1993), a study of an increase in the tax on securities in China also found a positive correlation between the rate of the tax and market volatility (Baltagi, Li & Li, 2006), and analysis of changes to the tax on securities traded in New York also found a positive correlation between the rate and the volatility of individual stock prices (Pomeranets et al., 2013).

[4] There is some evidence from a study of the deregulation of brokerage fees (which are a type of transaction cost) in Japan that market volatility is negatively correlated with transaction costs (Liu & Zhu, 2009).

to impact long-term price volatility globally. However, an FTT that only applied in New Zealand is unlikely to have any impact on global market stability due to the small size of our economy. An FTT in New Zealand is unlikely to reduce the probability of a financial collapse overseas, and would not be insulate New Zealand from the effects of the crisis (Hobbs & Marriott, 2015). It is possible, if an FTT does reduce liquidity in the New Zealand financial markets, that an FTT could amplify the impact on New Zealand of an overseas financial crisis. This is because having less liquidity would slow the rate at which New Zealand financial markets responded to the crisis.

2.6 Revenue potential

24. FTT proponents view the tax as an administratively simple way to raise significant revenue at a low rate, provided that the tax is applied broadly. A range of 0.1 to 0.5 percent tax on the total value of the transaction is the typical range of rates proposed for an FTT (Burman et al., 2016), although rates as low as 0.005% have been proposed to minimise the impact on liquidity or incentive to shift the location of transactions (Matheson, 2011). The argument is that such a small rate will only result in small distortions in the market, minimising the negative impacts that the tax creates.

25. The amounts raised by FTTs on securities in other countries vary. The table below summarises the amount of revenue generated by a variety of FTTs across a number of countries between 1990 and 2009.

Table 1: Revenue from FTTs on securities as a percentage of GDP[5]

Country	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
France	.05	.01	.03	.02	.01	.01	.01	.01	.01	.01	.00	.00
Germany	.06	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Hong Kong											2.10	1.32
India							.02	.07	.12	.19	.1	
Italy	.08	.12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
Japan	.18	.11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
South Korea	.12	.18	.62	.37	.45	.32	.26	.41	.43	.58		
South Africa				.34	.36	.36	.46	.54	.58	.49	.51	
Switzerland	.56	.38	.85	.67	.50	.46	.47	.44	.46	.46		
Taiwan				.65	.77	.72	.85	.68	.79	1.07	.77	
UK	.12	.17	.45	.27	.23	.22	.22	.27	.28	.29	.22	

Source (Matheson, 2011)

26. One of the major initiatives in relation to FTTs since 2009 has been the introduction of a new FTT on securities by France in 2012. The impact of this tax on volatility and liquidity have been discussed earlier (with the empirical evidence showing a decrease in liquidity but no clear impact on market volatility). This tax was originally expected to be able to generate EUR 1.6 billion per year, but was later revised down to EUR 700 million for 2013. This revised amount corresponds to approximately 0.03% of GDP.[6]

[5] Values of .00 are due to rounding. Blank cells are a result of the country not having an FTT for the relevant year, or due to data not being available for the relevant year.

[6] The average exchange rate between the Euro and the USD in 2013 was 1 EUR = 1.328 USD https://www.ofx.com/en-nz/forex-news/historical-exchange-rates/yearly-average-rates/

27. The ability of an FTT to raise significant revenue in New Zealand is likely to be limited. This is primarily due to the ease with which an FTT could be avoided. The finance industry generally takes advantage of very small price differences. It is likely therefore that an FTT would shift the location of the settlement of some financial transactions away from the place where the tax is imposed. This may be limited by the other benefits that might exist in New Zealand (such as institutional knowledge, sunk infrastructure costs, and familiarity with the business environment).

28. While major financial hubs may not face a large reduction in activity, the risks are greater for countries with more peripheral financial markets (Matheson, 2011). For New Zealand, the attractions which would encourage settlement to stay here are not substantial compared with financial centres elsewhere in the world. An FTT is more likely to shift the location of financial transactions away from New Zealand. We also note that the risk of financial transactions leaving New Zealand in response to an FTT is greater than the risk associated with a tax on financial transactions, as described in another paper prepared for you, *Taxing Financial Services*. The risk is greater because an FTT would impose a greater cost on sophisticated traders who make a large number of trades, while taxes on financial services impose a smaller cost on a greater number of regular consumers of financial services.

29. Tax avoidance has resulted in significant revenue shortfalls in other countries. When Sweden introduced an FTT in 1984, for example, it was expected to generate significant revenue and stabilise financial markets. At its peak, the tax only raised 5 percent of its estimated revenue (Campbell & Froot, 1994). One of the primary reasons for the shortfall was the ease with which the tax could be avoided due to Sweden's proximity to London's financial markets (Hobbs et al., 2015). Due to New Zealand's proximity to the Australian Securities Exchange in Sydney, we would expect to see a similar phenomenon in response to a domestic FTT, where a significant number of transactions that currently occur in New Zealand shift to the Australian market (Hobbs et al., 2015). The 2001 Tax Review noted the possibility for significant avoidance through geographical relocation as a reason not to adopt an FTT in New Zealand (McCleod, 2001).

30. However, to the extent that relocation occurs, it could potentially reduce the negative impacts that an FTT would have on liquidity, volatility and efficiency. This is because, any relocation will mean that the same financial transactions occur, just utilising a different marketplace. However, it would also have negative implications for the size of domestic capital markets.

2.7 Economic efficiency

31. An FTT is also likely to have a large dead weight loss (which is made up of a number of factors, including the loss of economic activity due in part to the relocation of trades and the reduction in trades that would result from an FTT, and the potential increase

French GDP was USD 2.809 trillion in 2013, according to the World Bank http://www.assemblee-nationale.fr/14/rap-info/i1328.asp. This means that French GDP was roughly EUR 2.115 trillion in 2013. EUR 700 million would be 0.03% of that GDP

in cost of capital and market volatility) associated with the tax collected. The European Commission estimated that a broad-based FTT would have a dead weight loss of 93.2% as a percentage of the tax collected, based on certain assumptions about the number and value of transactions that would relocate outside the EU. This suggests that there are more efficient ways to raise revenue.[7] The dead weight losses are likely to be higher in New Zealand, given the scope for business to migrate away from New Zealand to other jurisdictions that do not impose an FTT.

32. The 'cascading' effect is one of the key causes of the dead weight losses associated with an FTT. Cascading occurs when taxes are repeatedly imposed through a production chain, resulting in multiple layers of tax on goods and services. (This is in contrast to GST, which is only paid once, when the final consumer is unable to claim an input credit.) A tax on financial transactions is inefficient because it imposes an arbitrarily higher tax impost on processes that require more financial transactions to take place. In other words, the more often an asset is traded, the higher the effective tax rate will be. FTTs can distort production decisions, such as by incentivising the vertical integration of production processes that would otherwise be inefficient in the absence of the tax. This cascading effect makes an FTT a relatively inefficient way of raising a given amount of tax revenue.

33. There are ways to partially counter cascading, such as by exempting certain types of transactions made by intermediaries, but such practice may facilitate avoidance of the tax (Burman et al., 2016).

34. An FTT could also lead to an increase in the cost of capital in New Zealand. This is because an FTT would lower the rate of return investors would expect on their investments that are subject to the FTT and therefore reduce the prices of those assets. This is an effect that has been seen from a number empirical studies of FTTs (Matheson, 2012). There is a possibility, however, that because New Zealand does not have a well-developed or large market for financial securities, the impact on asset prices and the cost of capital would be smaller than that found in other countries.

35. Despite the potential concerns around economic efficiency, proponents of FTTs point to taxes imposed in countries like Japan and the United Kingdom as examples of how an FTT can raise revenue without seriously damaging the competitiveness of their financial markets (Summers et al., 1989). Some FTTs have been able to exist for a long period of time, especially the stamp duty of 0.5% on the transfer of ownership of securities in UK registered companies, which has existed in one form or another for more than 300 years (Hobbs et al., 2015). The UK's FTT does, however, have a number of exemptions, such as that for derivatives, so that roughly 70% of transactions are exempt from the tax (Investment Management Association, 2011). It should also be noted that the general trend around FTTs over the past few decades has been to abandon them, primarily based on concerns of FTTs increasing the cost of

[7] By way of comparison, Diewert and Lawrence (1996) estimated the pure dead weight loss from raising an additional dollar of tax on labour income in New Zealand (the marginal deadweight loss) was $0.18 in 1990−91. A more recent study using a different methodology estimated that the marginal welfare cost of raising an extra dollar of revenue from taxing labour in New Zealand is $0.12 (Creedy & Monk, 2017). The large deadweight losses of an FTT suggest it is not the first best option for consideration if the primary goal of introducing a new tax is to raise revenue.

capital and impairing the competitiveness of domestic financial markets (Matheson, 2012).[8]

36. An FTT would likely be an administratively easy way to gather revenue, especially if it was applied in a broad way and had few exemptions. This is because the tax could likely be collected by a small number of sophisticated entities (Burman et al., 2016). The administrative burden would vary, however, based on how the tax is designed.

2.8 Distributional impact

37. While the legal incidence of FTTs generally falls on financial institutions, the economic cost may be absorbed by a mix of the financial institutions, customers, and workers (through lower wages). The possible effects of this are discussed below.

Horizontal equity

38. Groups and sectors that trade financial assets more regularly would face a disproportionate burden of an FTT. One significant group that will face a greater burden is savers. People who choose to save or invest more of their income as opposed to spending it would bear a greater proportion of the cost of an FTT. Even proponents of an FTT accept that it would result in lower returns for savers (Stiglitz 1989), although the size of the decrease is uncertain.

39. A significant number of New Zealanders currently have savings which would be negatively affected by an FTT, including a significant number of New Zealanders that are saving for their retirement in KiwiSaver schemes.[9] The cost of reduced asset prices and lower returns will impact all people with such investments, including KiwiSaver members. We would also expect the elderly population to be hit more heavily by an FTT, both because they are more likely to have more savings and because they have a shorter investment horizon (Schwert & Seguin, 1993).

Vertical equity

40. While a large portion of the cost of an FTT would fall on those that hold financial assets (savers/investors), it is important to note that the savers that would face the greatest cost would be those with a greater level of investments. These are typically the people with a higher level of income/wealth. It is this reason that Burman et al (2016) concluded that an FTT, at least in the US, would be a progressive tax that was borne predominantly by those with a greater level of wealth.

41. Some of the cost will also be borne by a mix of the owners, managers, and employees of financial institutions, and the consumers of financial services. The mix would depend upon the elasticity of demand for financial services, which would affect how

[8] The US eliminated its stock transaction tax as early as 1966. Germany eliminated its stock transaction tax in 1991 and its capital duty in 1992. Japan eliminated its share transaction tax in 1999. Australia eliminated its federal stamp duty on share transfers in 2001. Italy sharply reduced its capital and transaction duties in 2000. France eliminated its share transaction tax in 2008 (although France did introduce a new FTT on securities again in 2012).

[9] As of April 2018, 2,854,128 people were enrolled in KiwiSaver (KiwiSaver, 2018).

easily financial service providers could pass on the cost of an FTT to consumers. It is possible that consumers would face a significant portion of the cost due to higher borrowing costs, lower returns on savings and investments, and increased commodity prices (IMF Staff, 2010).

42. Some of the cost of an FTT would also likely be borne by New Zealand workers. This is due to the potential for an FTT to increase the cost of capital, which would result in less capital in New Zealand. Because New Zealand is a small, open economy, we would expect that the required after-tax rate of return of capital in New Zealand to be the same as the rate determined by the world market for capital. We would therefore expect less capital in New Zealand if an FTT was introduced, which would reduce the productivity of workers and result in lower wages (Matheson, 2011). It is possible that New Zealand is not entirely a price taker in the market for global capital, which would mean that capital owners would face some of the burden of the increase in the cost of capital.

43. Overall, while an FTT could potentially improve vertical equity as those with a high level of income/wealth will pay some of the cost, the fact that the consumers of financial services and workers might also face part of the cost means that the overall incidence is unclear (IMF Staff, 2010).

3. Conclusion and recommendations

3.1 Assessment against tax policy principles

Equity and fairness

44. As noted in the section above, based on the evidence, it is unclear what impact an FTT would have on the overall fairness in the New Zealand tax system. It is possible that it would improve the vertical equity of the tax system as those that own more financial assets will face a greater burden than those with low levels of assets. An FTT would not be consistent with the principle of horizontal equity, however, because it imposes a greater burden on some groups, such as savers, compared to others.

Efficiency and growth

45. Due to the risk of increasing the cost of capital, which could reduce the overall level capital in New Zealand and have a negative impact on the productivity of workers, an FTT would likely have a negative impact on New Zealand's economic efficiency and growth. If an FTT resulted in an increase in market volatility, this would have an additional negative impact on efficiency and growth. The fact that an FTT cascades is another reason why an FTT is not an efficient way to gather revenue.

46. For these reasons, an FTT would likely have a negative impact on New Zealand's long-term financial and physical capital.

Revenue integrity

47. Due to the ease with which an FTT could be avoided in New Zealand as a result of our proximity to Australia, we conclude that an FTT would likely have a negative impact on revenue integrity.

Fiscal impact

44. An FTT would be unlikely to have a significant fiscal benefit for New Zealand.

Compliance and administration

48. An FTT would likely be an administratively simple way to gather revenue and would not impose significant compliance costs (although this is dependent on any specific design decisions).

Coherence

49. The New Zealand tax system does not generally apply non-creditable taxes that cascade. Introducing an FTT would be contrary to this principle.

3.2 Recommendation

50. The Secretariat recommends that an FTT should not be implemented in New Zealand.

Glossary

Dead weight loss. A technical name for the *efficiency cost of taxation*. This is the cost to society due to individuals, households, and firms making consumption and production choices in order to pay less tax, in the case where the tax is not intended to change behaviour deliberately.

Economic incidence. The individual or entity which bears the final burden of a tax (or receives the benefit of a transfer), after response effects, such as price and wage changes, are taken into account. This is distinct from the legal incidence of the tax or transfer.

Financial institution. A business engaged in the business of dealing with monetary transactions, such as deposits, loans, investments and currency exchange.

Horizontal equity. Horizontal equity refers to people in similar circumstances being treated in a similar way. For instance, by paying a similar amount of tax in the context of the tax system, or receiving a similar level of benefit in the transfer system.

Investment horizon. The length of time over which an investment is made or held before it is liquidated.

Legal incidence. The individual or entity legally liable to pay a tax or receive a transfer bears the legal incidence of the tax or transfer. The legal incidence often differs from the economic incidence.

Rate of return. The profit on an investment over a period of time, expressed as a percentage of the investment's cost.

Tax cascade. A tax that is applied at multiple points in the supply chain without any deduction for the tax paid at earlier stages

Tobin tax. An excise tax on currency transactions.

Vertical equity. The principle that those with higher income or assets should pay higher amounts of tax.

Vertical integration. When a company expands its business operations into different steps on the same production path.

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