The New Zealand Broad-Base, Uniform-Rate GST: Virtue or Fallacy?

Chapter 20 in forthcoming book,


11 February 2021

Dr David White
Adjunct Research Associate
Centre for Accounting, Governance & Taxation Research
Victoria University of Wellington
New Zealand
Introduction

The New Zealand Goods and Services Tax (GST) is a modified version of the European VAT. While the New Zealand GST uses the same invoice-credit mechanism as the European VAT, it had two key innovations when it was designed in the mid-1980s. First, it had a uniform rate of tax, not multiple rates. Secondly, its tax base was comprehensive, without exemptions other than those necessary to define the base. In New Zealand, the GST tax instrument was designed to be efficient in practice and collect revenue at least cost, leaving distributional and other social and economic objectives to be achieved by other instruments: the income tax, the social welfare system (especially for working families and children), government expenditure and regulation. For 35 years, these two, and other, innovative features of the New Zealand GST have received favourable comments from international commentators, with some characterising it as a ‘second-generation’ VAT.

The focus of this country chapter is rate and base policy as I consider it will be the most important issue for the New Zealand GST in the medium term, especially if the uniform GST rate of 15% were increased. Issues such as the optimal trade-offs and innovations in the New Zealand GST treatment of real property, financial services or internet transactions, for example, are important but narrowing the New Zealand GST base or introducing reduced tax rates would have significant implications for revenue generation and both individual and social welfare, as will become clear in this chapter. In addition, there is already sufficient literature on the trade-offs involved in New Zealand’s responses on key VAT technical problem issues.

VAT rate policy and VAT base policy have been discussed in general terms in chapters 4 and 5 respectively. In this part of the book, these issues are discussed in respect of two OECD countries in the Pacific Ocean that both had broad-base, single-rate consumption taxes for many years, with Japan departing from that longstanding policy on increasing its standard rate of consumption tax to 10% in 2019. When New Zealand last raised its standard rate of GST from 12.5% to 15% in 2010, however, it retained its broad-base, uniform-rate policy. While this approach to GST design has been sustained by all New Zealand governments for 35 years now, suggesting a degree of acceptance in the community, it has at times been contested, especially in relation to the tax treatment of food and basic necessities. For some, the comprehensive, uniform-rate approach in the GST is a ‘virtue’: it is a less costly way of

---


collecting revenue, with other governmental instruments available to achieve distributional, wellbeing and other objectives they seek. For others, it is a ‘fallacy’: the GST itself should balance efficiency and equity, as there is no guarantee that other governmental instruments will achieve the distributional, wellbeing or other objectives they seek.

The purpose of this chapter, then, is to examine some of the latest research and data about the revenue and economic performance of the New Zealand broad-base, uniform-rate GST and its distributional effects and reflect on some of the implications for New Zealand if the GST base were narrowed or multiple rates of tax were introduced in future. It takes a practical tax policymaking perspective, drawing on my experience, including: being a tax policy analyst in the New Zealand Treasury from 1986 to 2000; co-organising a multi-disciplinary team of 30 experts from eight countries to test the New Zealand GST model in 2006-2007; co-organising a review of the New Zealand tax system and participating as a member of the Victoria University of Wellington Tax Working Group, which recommended the last increase in the New Zealand standard rate of GST in 2010; and, being a VAT commentator for the book of initial tax studies for the Mirrlees Review of the United Kingdom tax system from 2006-2010, with the final Mirrlees review team recommending a broad-base, almost uniform-rate VAT.

Part A of this chapter considers the New Zealand GST rate and base recommendations of the three reviews of the New Zealand tax system that have taken place over the last 20 years, as well as the rate and base recommendations of recent reviews of the United Kingdom VAT and the Australian GST (and briefly noting the revenue and economic impact of Canada’s GST base and rate structure). Part B examines the latest data on the relative revenue performance, neutrality and distributional effects of New Zealand’s broad-base, uniform-rate GST, mostly in relation to OECD countries, and particularly to the United Kingdom, Australia and Canada. Specifically, it reviews the amount of revenue collected, the level of the standard rate, its distributional effects, the revenue and economic performance of the tax, and its operation in an economic crisis. Part C concludes.

---

4 Agreeing with Dr Michael Keen (then Head, Tax Policy Division, IMF) that GST/VAT was 'shamefully under-researched' at the time (Keen speaking at the International Tax Dialogue VAT Conference held in Rome in 2005) and collaborating with Professor Richard Krever (then of Monash University, Melbourne), this 2006-2007 New Zealand GST project: celebrated in the Grand Hall of the New Zealand Parliament the work of 15 major contributors who designed and implemented New Zealand’s innovative GST in the mid-1980s; held a conference entitled 'Twenty Years of GST: The Best Path Forward' with 30 speakers from 8 countries, as often as possible organised in multi-disciplinary and international panels, each addressing a key issue (142 delegates from 20 countries attended); with support from the IMF, held a workshop where 15 South Pacific tax administrators from 8 countries discussed the relevance of the conference discussions for each of their countries; published a book of conference papers on current and future GST/VAT issues in March 2007; and, published 6 journal articles based on conference papers in New Zealand Journal of Taxation Law and Policy in 2007. The book is Richard Krever and David White (eds), GST in Retrospect and Prospect, (Brokers Ltd, 2007).


6 Dickson and White, supra n. 3, at 387-406.
[A] Expert Reviews of the Broad-Base, Uniform-Rate Design

As noted in the introduction, there has been a degree of acceptance and disapproval of the broad-base, uniform-rate design of GST in New Zealand, especially in relation to the tax treatment of food and basic necessities. Most New Zealand political parties have, at least once while they were in opposition in the last 35 years, taken GST-exemption policies to the electorate but, with insufficient support, the policies have subsequently been dropped from their party platforms. In 2010, a private member's bill to exempt healthy food from GST received insufficient votes in Parliament to be referred to a select committee for consideration. Support for the broad-base, uniform-rate approach has come from policy officials and economists in particular, and even a child poverty welfare group, while opposition to it has included some public health academics and a legal academic, mostly arguing their case on equity grounds. A collective with a wide membership of health, consumer and community organisations and academic leaders was established in 2018 to reduce the harm from tobacco, alcohol and unhealthy foods and beverages. Among other things, Health Coalition Aotearoa is promoting further research on removing GST from fruit and vegetables. And, in 2018-2019, the Tax Working Group set up by the government to review the New Zealand tax system received ‘many public submissions’ arguing that the GST rate should be reduced, most arguing that this would increase the progressivity of the tax system. It also received ‘a large number of submissions arguing for exceptions to the GST base’, such as healthier food and drink or items likely to be purchased by low-income households.

In this section, we examine the assessment by expert reviews in New Zealand, the United Kingdom and Australia of their national VAT or GST systems and their tax base and rate recommendations. An interesting point to bear in mind, which is covered in detail in the next section, is that an OECD measure of VAT performance at least suggests that the New Zealand GST with its broad base and uniform rate has been collecting almost all of the potential New Zealand GST base. By contrast, the

---

7 For example, the National Party in 1987, the Labour Party from 2010 to 2014, and the Māori and Mana Parties in 2010. The exception is the New Zealand First party, which has had some GST-exemption policy platform for much of its existence since the 1990s.


GSTs in Australia and in Canada, as well as the VAT in the United Kingdom, have been collecting less than half their respective potential tax bases.

Three New Zealand Tax Reviews

Three reviews of the New Zealand tax system have occurred in the last 20 years: the McLeod Review in 2001; the Victoria University of Wellington Tax Working Group (VUW TWG) in 2009-2010; and, the Tax Working Group (TWG) in 2018-2019.

In 2001, the government-appointed McLeod Review supported the broad-base, uniform-rate design of the New Zealand GST and did not propose material reform. This group argued that “GST is roughly proportional to income for more than 80 percent of households” and came to the assessment that “using multiple rates or exemptions to remedy concerns about regressivity would create other costs and anomalies likely to have worse impacts.” It concluded that New Zealand’s tax mix with two main tax bases at the time was broadly right but that as GST distorted economic decisions less than the income tax, any overall increase in tax in future should be implemented through GST and any reduction in tax should be focused on income tax.

In 2009-2010, the Victoria University of Wellington Tax Working Group was set up to review the tax system with support from the Ministers of Finance and Revenue. This group also supported the broad-base, uniform-rate design of the New Zealand GST. It proposed material tax-mix reform: a shift away from income tax towards GST and tax on immovable property. All members of the VUW TWG supported New Zealand reducing income tax rates to reduce the potential adverse impact of New Zealand’s tax structure on economic growth over the short- to-medium term. They disagreed, however, about how to fund those income tax cuts in a fiscally-neutral package. Most VUW TWG members supported increasing the standard GST rate from 12.5% to 15% and increasing taxation of immovable property, with mixed views about ‘whether the efficiency benefits from increasing GST would be sufficient to outweigh possible equity effects.’ The argument for increasing the GST rate was that it would reduce the tax bias against saving and investment relative to consumption. To compensate people who would be disadvantaged, the group recommended increased benefit levels and reductions in the personal tax scale, not a narrowing of the GST base, for example by excluding food. All of the VUW TWG agreed that such an exclusion from the base would ‘substantially reduce’ the efficiency of GST, increase compliance and administrative costs and have ‘limited impact on equity’.

The government accepted many of the VUW TWG recommendations. From 1 October 2010, the standard GST rate was increased from 12.5% to 15%, all personal income tax rates were reduced and

15 Ibid., at 26.
16 Victoria University of Wellington Tax Working Group, *supra* n. 5, at 66. Weighing on my equity concerns as we expressed our views in the VUW TWG on increasing the GST uniform rate was my assessment that the group would not express sufficient support for base broadening with respect to the taxation of capital (an essential element in the tax-mix package in my opinion). For my views on that topic, see Leonard Burman and David White, *Taxing Capital Gains in New Zealand*, 9 New Zealand Journal of Taxation Law and Policy 355 (2003); Leonard E Burman and David I White, *Taxing Capital Gains in New Zealand: Assessment and Recommendations* (A paper commissioned by the New Zealand Treasury for consideration by the VUW TWG, available at <www.victoria.ac.nz/sacl/centres-and-institutes/cagtr/twg/twg-papers-index> (accessed 31 January 2021).
17 Ibid.
a GST compensation package for adversely-affected welfare groups was implemented. From 1 April 2011, in most cases, the company income tax rate was reduced (from 30% to 28%). Changes to the way that property was taxed were also implemented largely in the income tax. The tax mix change was meant to be broadly fiscally neutral.

The third and most recent New Zealand tax review was in 2018-2019. The terms of reference of this government-appointed Tax Working Group excluded consideration of an increase in the GST rate. This group also supported the broad-base, uniform-rate design of the New Zealand GST, expressing its view that “the broad base of New Zealand’s GST is one of its greatest strengths.”18 While acknowledging public concerns about the regressive nature of GST, the Group considered, but did not recommend, either a reduction in the GST rate or the introduction of exceptions, such as food and drink. The group questioned the efficacy of GST exceptions in achieving distributional goals and the degree of pass-through of GST reductions to consumers.19 They noted the complexity and significant compliance costs of GST exceptions and the dangers of opening up political lobbying. In the group’s view, welfare payments or personal income changes were more effective ways to increase progressivity than making changes to the GST. Finally, the group noted that maintaining the 15% rate ensured that GST was collected from people, such as tourists, who would otherwise not be part of the New Zealand tax base.20

Review of a first-generation VAT in United Kingdom: The Mirrlees Review

The Mirrlees Review was a comprehensive review of taxes and transfers chaired by Nobel economics laureate Sir James Mirrlees and undertaken from 2006 to 2011. It involved a multi-disciplinary, international team of 73 experts who had different roles in a two-step process. First, it commissioned studies dealing with different aspects of the tax system and a series of commentaries by different expert authors on those studies, publishing the studies and commentaries in a book. Next, a review

---

18 Tax Working Group, supra n. 13, at 83.
19 Recent Eurozone research supports these pass-through concerns of the Tax Working Group. A group of researchers empirically tested the assumption often made in practical tax policy making and in distributional analyses that VAT reform changes (changes in standard rates, reduced rates and reclassifying commodities across existing rate categories) are fully passed through to consumer prices. The researchers used monthly observations on consumer prices and VAT rates for about 70 commodity groups in 17 Eurozone countries over the period from 1999 to 2013 but, unfortunately, were not able to incorporate some other factors they identified as possibly having a systematic impact on VAT reform pass through (individual VAT reform announcement dates, market structure, trade intensity, the degree of compliance and the business cycle, for example). Their results suggest that the policy making assumption of 100% pass through of standard VAT rate changes in the long run (before, during and after the standard rate change) is a reasonable starting point. For changes in reduced rates, however, cumulative pass through in the long run was estimated at only 28%. For VAT reclassifications across existing rate categories, ‘average pass through seems to be typically close to zero’. The researchers argued that the results ‘caution against the ... conventional assumption that the benefits of reduced rates are fully passed on to the poorer households they are generally intended to benefit’ but there is more work to be done in future, hopefully with additional data sets not available at present. Dora Benedek et al, *Varieties of VAT Pass Through* 27 International Tax and Public Finance 890–930, especially 901-906 and 914-916 (2020), available at https://doi.org/10.1007/s10797-019-09566-5 (accessed 31 January 2021.).
team published final conclusions regarding tax design issues for open economies and made policy
recommendations for the United Kingdom tax system in a second book.

For the final Mirrlees Review team, the main problem with the United Kingdom VAT was that it applied
zero or reduced rates of tax on far too many goods and services, often justifying this as a means of
supporting the poor. This policy resulted in large administrative and compliance costs and created
distortions between different types of consumption. While there might be arguments for differential
taxation to offset work disincentives, most of the potential gains, other than relating to childcare, for
example, were not sufficient to outweigh practical problems and the costs of complexity and distorting
spending patterns.21

The Review pointed out that New Zealand provided a working example of how it was possible to apply
the standard rate of VAT to almost all goods and services.22 Putting the cost of complexity to one side,
it estimated the costs of a narrow base in the United Kingdom VAT through the distortion to spending
patterns: “simulations suggest that, if uniformity were optimal, extending VAT at 17.5% to most zero-
rated and reduced-rated items would (in principle) allow the government to make each household as
well off as it is now and still have around £3 billion of revenue left over. The true figure could be higher
or lower than this.”23

One of the main themes of the Mirrlees Review was that a tax and transfer system must be considered
as a whole. Not every tax needed to achieve all objectives. As the Review considered that VAT was a
‘poor choice of tax to use to achieve redistribution’, they recommended that the United Kingdom
should tax ‘virtually all goods and services at the full rate’, addressing the distributional and work
incentive effects of broadening the VAT base in an ‘appropriate package of reforms to the personal
tax and benefit system’.24 Their package was designed to avoid damaging work incentives. In assessing
their own tax-and-benefits package, they emphasised the benefits of measuring distributional effects
against expenditure and taking a lifetime perspective and the limitations of measuring VAT burdens
against income, particularly a snapshot of income over shorter periods (a year, for example).25

Review of a second-generation GST in Australia: The Thodey Review

The most recent consideration of the Australian GST design by an expert panel was completed in
August 2020 by the NSW Review of Federal Financial Relations (Thodey Review).26 While the review
was being undertaken, there were two catastrophic events: the unprecedented bushfire season in
2019-2020 with the fire ground in New South Wales covering 7% of the state, and the ongoing COVID-
19 pandemic. The financial cost of recovery from these two events is so great it would test the best
tax system. The report reviewed the New South Wales current taxes and tax options, finding many
areas for substantial improvement, including in the Australian GST.

The largest revenue source for New South Wales is the Australian GST, which is collected by the federal
government and distributed to the states. The Thodey Review pointed out that the 20-year-old GST

21 Mirrlees, supra n. 1, at 484.
22 Research and data about the New Zealand GST experience had been discussed in the VAT commentary by
Dickson and White in the first Mirrlees book, supra n. 3, at 387-406.
23 Mirrlees, supra n. 1, at 484.
24 Mirrlees, supra n. 1, at 484.
25 Mirrlees, supra n. 1, at 485.
was Australia’s last major tax reform and that it had meant to be predictable, result in minimal damage to the economy and grow with the economy. But instead of doing that, the GST tax base have been shrinking over the past 20 years, as the share of household spending subject to GST fell from around 60.8% in 2001-2002 to 55.4% in 2018-2019. The escalating cost of exempt services such as health and education were a major part of the problem. Further, as the population aged, more expensive health technologies were introduced and health expectations rose, the problem was likely to be exacerbated.

Prior to the COVID-19 pandemic, the Australian federal government had predicted that the GST exemptions would result in $27.4 billion of revenue foregone in 2019-20: fresh food ($7.6 billion); health ($7.0 billion); education ($4.9 billion); water, sewerage and drainage ($1.1 billion) and other goods and services. The Thodey Review concluded that broadening the GST base to cover all of these exemptions would improve the existing Australian GST by, among other things:

- tackling the base erosion issue, as the level of GST revenue would reflect the level of consumption, not whether heightened consumer demand is taxed or not taxed;
- stabilising revenues, as more non-discretionary spending, which is typically more consistent, would be taxed; and
- simplifying compliance and administration of the GST.

The Thodey Review identified some difficult transitional issues with base-broadening but recommended that ‘State governments, in consultation with the Commonwealth, should assess and agree options for lifting the GST rate and/or expanding the base over the medium to longer term to offset erosion and move away from more harmful Commonwealth and state taxes.’ It also noted that credible reform of the GST base or rate would require higher social security payments and lower income tax rates to be used to compensate those on low incomes and ensure that they do not unfairly bear the burden of reform.

[B] The Relative Performance of the New Zealand Broad-Base, Uniform-Rate GST Design

Given that New Zealand and international expert reviews have often made favourable comments about the New Zealand ‘second-generation’ VAT with its broad-base, uniform-rate design, this section

---

28 NSW Review of Federal Financial Relations, supra n. 26, at 36. Similar concerns with another second-generation GST, the Canadian GST, have been expressed by Canadian public finance scholars: for example, see Michael Smart, Departures from Neutrality in Canada’s Goods and Services Tax in After Twenty Years: The Future of the Goods and Services Tax, 81-114 at 81 (Jack Mintz and Stephen Richardson, eds, Canadian Tax Foundation, 2014). “In reality, Canada’s VATs have large exemptions, rebates, and rate preferences that reduce revenues and hamper productivity. If all these tax preferences were eliminated, government VAT revenues would increase by as much as $39 billion, or more than 50 percent. Moreover, taxing consumer commodities at a single rate reduces opportunities for tax evasion, simplifies tax compliance, and in most cases increases economic productivity. Given the fiscal and productivity challenges currently facing Canadian governments, a new look at VAT design is clearly warranted.” More generally on compliance costs, see Evans and Krever in chapter 6 in this book and Chris Evans et al, Diagnosing the VAT Compliance Burden: A Cross-Country Assessment, 31(2) International VAT Monitor (2020).
29 Ibid., at 39.
now assesses the latest data and research on the relative performance of this New Zealand GST design. The comparisons are sometimes in relation to all OECD countries (OECD), sometimes all OECD countries, except Colombia, and selected other economies: Argentina, China, Indonesia and South Africa (‘OECD Plus’) and sometimes three selected countries: Australia, Canada and the United Kingdom. This section starts by painting the broader OECD picture of ‘general consumption taxation’ (i.e., VAT/GST, sales taxes and other general taxes on goods and services that are not specific, such as excises). Then, it concentrates on the major type of general consumption tax, the VAT/GST. At all times, the focus is on where New Zealand GST design and practice sits in this broader context. The aggregated percentages in this section are unweighted averages.

This section reviews the OECD data and research about:

1. The reliance on general consumption tax revenues in OECD countries;
2. The amount of New Zealand GST collected as a percentage of GDP and total taxation;
3. The relative reliance on GST revenue by New Zealand;
4. The relative standard rate of the New Zealand GST and the distributional effects of having a uniform rate of tax on a broad base;
5. The relative performance of the New Zealand GST using the OECD concept of the VAT revenue ratio, which seeks to measure the neutrality and uniformity of VAT/GST tax systems; and,
6. The relative performance of a broad-based, uniform-rate tax, such as the New Zealand GST, in an economic crisis.

First, there is a broad OECD picture of growing reliance on general consumption taxation. From 1975 to 2018, the increased reliance was almost two-fold: as a percentage of GDP in OECD countries, the increase was from 4.1% to 7.1%; as a percentage of total tax revenue in OECD member countries, the increase was from 13.4% to 21.2%. And, from 1975 to date, the key general consumption tax development has been the widespread adoption of the VAT or GST system. In 1975, there were just 13 VATs in the current OECD member countries. Today, 36 of the 37 OECD countries have a VAT (the USA being the exception). As a consequence of the wide adoption of this invoice-credit method of consumption taxation, value-added taxes in OECD countries have, from 1975 to 2018, more than doubled their contribution to tax collection, measured as a percentage of GDP from 3.1% to 6.8%, and as a percentage of total taxation from 8.8% to 20.4%.

Secondly, New Zealand has followed this OECD trend but New Zealand’s increasing reliance on GST revenue over the last 35 years is even more marked, with its predecessor general consumption tax collecting around 10% of total taxation in the mid-1980s and GST collecting around 30% of total taxation today:

---

31 Ibid., at 16.
32 Ibid., at 37.
• In 1985, a narrow-base wholesale sales tax with many exemptions and 19 rates ranging from 10 to 60 per cent\textsuperscript{33} was just 3.2% of GDP and 10.4% of total taxation;

• In 1990, the GST, with its broad base and uniform rate of 12.5%, was 8.4% of GDP and 22.4% of total taxation, and;

• In 2018, the same broad-base GST, now with a uniform rate of 15%, was 9.7% of GDP and 29.6% of total taxation.\textsuperscript{34}

Thirdly, New Zealand’s reliance on GST revenue is now high in comparison with other OECD Plus or OECD countries. The results can differ according to the year and measure used. Comparing VAT revenues as a share of GDP by country in 2018, for example, New Zealand ranks highest and Chile 9\textsuperscript{th} highest (see figure 1 below). Comparing VAT revenues as a percentage of total tax revenues in 2018, however, Chile ranks highest and New Zealand is second-highest.\textsuperscript{35}

Figure 1: VAT revenues as a share of GDP by ‘OECD Plus’ country in 2000, 2008 and 2018

![Graph showing VAT revenues as a share of GDP by ‘OECD Plus’ country in 2000, 2008, and 2018.]

Fourthly, New Zealand has been able to generate that relatively high level of GST revenue, whether measured as a share of GDP or total taxation, charging a relatively low standard VAT rate across most goods and services expenditure. Figure 2 below shows that the standard New Zealand GST rate of 15% is the sixth lowest standard rate among 35 OECD countries with a VAT. Chile with a higher standard rate of 19 percent on a very wide base has the 11th lowest standard rate.

---

\textsuperscript{33} John Due, \textit{The Wholesale Sales Tax in Australia and New Zealand} 31:2 Canadian Tax Journal 207 at 210 and 223 (1983).


\textsuperscript{35} OECD, \textit{supra} n. 30, at 17. This is a comparison between OECD countries.

If a substantial item of household expenditure, such as food, were excluded from the New Zealand GST tax base, a revenue-neutral GST reform, for example, would require taxes to be raised elsewhere. One option would be to impose GST at a higher uniform rate on all other goods and services, which might invite producers, distributors or consumers of those goods and services to seek concessional treatment too. Another option would be to raise the lost revenue by imposing much higher rates of GST on a limited range of specified goods and services. In this case, there would be an even greater incentive for political lobbying by producers, distributors or consumers of the affected goods and services.

New Zealand has long experience from 1933 to 1985 of the many problems posed by consumption taxation with multiple (sometimes very high) rates and exemptions (by 1985, the New Zealand narrow-base wholesale sales tax had 19 rates ranging from 10 to 60 percent). Other OECD countries have experience of these difficulties in relation to their current VATs. Without the barrier created by New Zealand’s ‘clean’ GST, with its comprehensive base and uniform rate, many OECD countries continue to apply a wide range of reduced rates. From 2018 to 2020, at least 15 OECD countries extended the application of their reduced VAT rates and many OECD countries introduced temporary VAT rate reductions in response to COVID-19. The history of VAT reduced rates or zero-rates often involves movable boundary lines that may have social welfare implications, particularly if the line-drawing distorts production.

A popular rationale for a multiple-rate GST structure is that it is necessary to support the poor. As the New Zealand GST model was being developed in the late 1970s and early 1980s, as well as over the last 35 years, there has been on-going theoretical and empirical research on the distributional effects of the New Zealand GST. In 2020, Thomas, a senior economist at the OECD, completed his PhD thesis and published a paper in the OECD taxation working paper series on this topic. He has developed insights for VAT policymakers using microsimulation modelling, drawing on household expenditure microdata from household budget surveys in 27 OECD countries. His OECD paper confirms the view that VAT burdens are better measured relative to expenditure rather than income, as this removes the distorting influence of savings behaviour that occurs when an income-based comparison is made. He finds that a broad-based VAT, such as the New Zealand GST with few reduced VAT rates or exemptions, can produce "a small degree of regressivity." Further, even roughly proportional VAT/GSTs can have ‘significant equity implications for the poor.’ The question is how best to ensure progressivity in the whole tax-welfare system to compensate households on low incomes and ensure that they do not unfairly bear the burden of paying VAT.

In part of his recent PhD thesis, Thomas uses behavioural VAT microsimulation models built for 23 OECD countries to investigate whether reduced VAT rates or targeted cash transfers would provide more effective support for poorer households. His microsimulation results vary depending on the specific product receiving the reduced VAT rate, with some reduced rating of products having a

37 Due, supra n. 33.
38 OECD, supra n. 30, at 43-44.
39 For a taxonomy of tax policy notches (discontinuous quantity or characteristic jumps in the choice set of individuals and firms), the line drawing that creates them, including in commodity taxation, and their welfare costs, see Joel Slemrod, Buenas Notches: Lines and Notches in Tax System Design 11:3 eJournal of Tax Research 259 (2013).
progressive effect and other reduced rating having a regressive effect. A reduced VAT rate for food consumed at home, for example, generally had a progressive impact but rich households received a larger aggregate benefit than poor households. The second compensation mechanism he tested with microsimulation models was an income-tested cash transfer. In all 23 OECD countries, these microsimulation results showed that an income-tested cash transfer better targeted support for most poor households than reduced VAT rates. Surprisingly, a universal cash transfer was also better than reduced VAT rates at targeting support to poor households. After comparing the empirical results of these stimulations, Thomas concludes that countries are better advised to use their income tax or benefit system to achieve desired distributional goals than using reduced VAT rates.\textsuperscript{41}

Thomas also uses a model that is data and resource demanding to examine the effects of introducing reduced rates to New Zealand’s broad-base, uniform-rate GST to provide support for poorer households, taking into account behavioural responses induced by the price changes. Consistent with his other findings, he concludes that the current New Zealand family tax credit provides ‘far superior’ support to poorer households than reducing GST rates. In his opinion, “it is clear that New Zealand should maintain its current approach of a broad-based single-rate GST and income-tested tax credits to support poorer households.”\textsuperscript{42}

Figure 2: Standard rates of VAT in OECD Countries, 2020

![Graph: Standard rates of VAT in OECD Countries, 2020](source: OECD author’s work based on country information.\textsuperscript{43})


\textsuperscript{42} Ibid., 163-196, at 196. Again, the description of the setting up of the model and selection of data, as well as the results of the simulated reforms is well worth reading.

\textsuperscript{43} OECD, \textit{supra} n. 30, at 42.
The fifth point concerns the relative revenue-raising performance of New Zealand’s broad-base, uniform-rate GST in comparison with other VAT/GSTs. The IMF and OECD have developed VAT performance measures to assist policymakers to assess performance and identify how to raise additional revenue by improving VAT performance. The OECD VAT Revenue Ratio (VRR) is the amount of VAT taxation collected as a proportion of the potential VAT base. It is an estimate of the loss of revenue from expenditure exclusions from the tax base and reduced rates of tax, as well as poor compliance through fraud, evasion or tax planning. In other words, it is an attempt to assess the policy gap and the compliance gap together. If VAT were collected at the standard rate on the entire potential tax base and all revenue was collected, the VRR would be 1.0. There are several methodological difficulties in calculating the VRR, which have been well canvassed by the OECD and others: for example, how do you define the potential VAT base for each country and how do you ensure that comparable data is being used in the cross-country comparisons? Without considering these issues further here, we can at least observe that OECD VRRs are rough guides of VAT system performance, which may be useful if treated with care.

During the global financial crisis of 2008-2009, the unweighted average VRR for OECD countries declined from 0.59 in 2007 to 0.53 in 2009. Since 2010 (to 2018), the OECD average VRR has remained about 0.55, suggesting that, on average, about 45% of potential VAT revenue is not collected as a result of exclusions from the tax base, reduced rates of tax and non-compliance. From a tax revenue collection perspective, that is a vast amount of revenue still on the table, especially while governments face huge fiscal, economic and social challenges.

And what are the VRRs of the four OECD countries selected for comparison in this paper? First, recall that VAT experts sometimes draw a distinction between first-generation VATs from Europe and second-generation VATs that were implemented later with improvements, putting into practice lessons learned from Europe. The OECD VRRs for 2018 in Figure 3 below, however, at least suggest that the policy-and-compliance gap for the first-generation VAT in the United Kingdom is much the same as that gap in the so-called second-generation VATs in Australia and Canada. Starting from the bottom, the VRR for the United Kingdom is 0.45, for Australia 0.47 and for Canada 0.49. All of them are below the OECD unweighted average of 0.56.

And what of New Zealand? According to the OECD, the VRR in 2018 is 0.99 - if this were so, it is saying that New Zealand as collecting GST at 15% on almost the entire potential tax base and that all the GST revenue is being collected. The OECD commentary lists a number of factors that underlie the high VRR that the New Zealand GST has had since it was first implemented in 1986: a broad base, limited exclusions, limited zero rates, and the taxation of public services (where there are upward and downward modifying effects on the calculation).

Even if it is necessary to make some downward adjustment to the New Zealand VRR, the VAT performance comparison with the other three countries is stark. Using the VRR, the VATs in the four selected countries are ranked, best to worst, out of 36 VATs in the OECD: New Zealand No 1, Canada No 27, Australia No 28 and the United Kingdom No 31. The non-neutralities in the United Kingdom, Australian and Canadian VAT/GSTs are large compared with other countries, especially New Zealand. Given their fiscal, economic and social imperatives, the question of how the United Kingdom,

---

44 OECD, supra n. 30, at 51-56; Dickson and White, supra n. 3, at 388-389; Benge et al., supra n. 3, at 484-485.
Australia, and Canada could improve the design of their VAT/GST systems to collect more of this potential revenue is a significant issue in each of these countries, as we saw in Part A.

Figure 3: OECD VAT Revenue Ratios 2018

![OECD VAT Revenue Ratio 2018](image)

Source: OECD author's own work. OECD is OECD unweighted average. 45

Figure 4: New Zealand: Retail Sales and Private Consumption

![New Zealand Retail Sales and Private Consumption](image)

Source: Stats NZ. 46

---

45 OECD, supra n. 30, at 53.
A sixth and final point relates to the tax revenue merits of a broad-base, uniform-rate VAT, both in an economic crisis and in the period of adjustment afterwards, while revenues are returning to pre-crisis levels. In the last 13 years there have been two global economic crises when consumption has slumped in New Zealand: in 2007-09 during the global financial crisis and in 2020 with the COVID-19 pandemic (see figure 4 showing annual percentage change in New Zealand nominal retail sales and real private consumption in the period from 2006 to 2020, for example). For New Zealand with a broad-base, uniform-rate GST that includes government consumption, any changes in the pattern of consumption during either of these economic crises and in the period of adjustment afterwards is not likely to be material. For New Zealand GST revenue estimation and collection purposes, it is the level of consumption that is important, not what is being consumed – almost all consumption is part of the tax base and it is taxed at the same uniform rate.

For a country that has a GST/VAT with a narrower base and/or a multiple rate structure, such as Australia, Canada or the United Kingdom, both the level and type of consumption occurring in the economic crisis and the subsequent period of adjustment are relevant, as is the GST/VAT tax treatment of the changing pattern of consumption. For VAT/GST revenue estimation and collection purposes in these countries, it is necessary to estimate the levels of consumption and also whether there has been a change in the pattern of consumption that involves greater expenditure on goods and services that are taxed at lower rates or zero rates.

Recent research by Simon and Harding examines what drives consumption tax revenues, in part using the 2007-2009 global financial crisis and its aftermath as a case study. During that crisis, revenue from all taxes as a share of GDP fell significantly but consumption tax revenue was typically less affected, largely, it seems, because of the relative stability of total consumption compared to other economic aggregates such as investment. Nevertheless, it took until 2012 for VAT revenues to return to their pre-crisis levels. During the 2007-2009 crisis, the researchers noted changes in consumption patterns, with increases in government spending and in private consumption on ‘necessity goods.’ As these goods are often taxed less in narrow-base, multiple-rate VAT systems, this adversely affected the performance of these VATs as measured by the OECD VAT Revenue Ratio (as may changes in taxpayer compliance during the crisis have played a part but, as they note, this was not examined in this research). The research found that even though most OECD countries had increased their VAT rates since 2009, the overall OECD implicit tax rate on consumption (consumption tax revenues as a share of their tax base) in 2017 was only slightly higher than it was before the global economic crisis.47

Simon and Harding point out the negative implications from their research for some of these countries with low VRRs:

“These findings imply that in the presence of reduced rates and exemptions in VAT systems, increases in standard rates have not increased the implicit tax rates on consumption as strongly as they did before the crisis. In light of lasting changes in the pattern of consumption post-economic crisis, VAT revenues, particularly in countries with low VRRs and high shares of government consumption, are likely to be more exposed to economic changes, as that part of the tax base that is subject to the standard VAT rate is smaller now than it was prior to the

---

crisis. This is particularly the case if an economic crisis directly affects private consumption, rather than investment, as was the case in the [2007-2009 economic] crisis.“

The researchers suggest that, in theory, broadening the VAT base and narrowing the range of reduced rates could help make consumption tax revenues more stable in economic crises, quickly adding, in effect, that any reform and compensation packages need to be adapted to local circumstances.

What can we say in January 2021 about the performance of New Zealand’s comprehensive, uniform-rate GST in the COVID-19 pandemic, with New Zealand following an early elimination strategy? In the midst of the pandemic with so much uncertainty ahead, all we can do is report the most up-to-date data. During a 5-month period ending 30 November 2020, New Zealand core Crown expenses were 17.1% higher than the corresponding period in the previous year, much of the increase relating to the high level of COVID-19 social security, welfare and health expenditure to support individuals and firms through this very difficult time. The revenue collection performance of the broad-base, uniform-rate GST, however, must be reassuring to the New Zealand Minister of Finance. On the basis of numerous activity indicators, the New Zealand Treasury expects that a strong recovery in economic activity had occurred in the September quarter of 2020, but that sales would grow more slowly in coming quarters. As a consequence of New Zealand’s strong private consumption after the COVID-19 lockdowns, GST receipts on the comprehensive tax base have also been strong, exceeding year-ago levels (see figure 4). It is astonishing that private consumption is so strong and that GST revenue is up 9.8 percent in the five months to the end of November 2020 compared with the corresponding five-month period a year earlier in 2019 before COVID-19 struck (corporate taxes rose 7.2 percent using the same 5-month periods of comparison in 2019 and 2020). Of course, the path that the New Zealand economy and consumption follow from here is highly uncertain, with much depending on what happens with the COVID-19 pandemic, and other national and global developments.

[C] Conclusions

This chapter identified GST rate and base policy as the most important issue for the New Zealand GST in the medium term, especially if the uniform GST rate of 15% were increased. It argued that narrowing the New Zealand GST base or introducing reduced tax rates would have significant implications for revenue generation and both individual and social welfare. Taking a practical tax policymaking perspective, it considered expert review analysis of GST/VAT systems in three countries and the latest research and data about the relative revenue and economic performance of the New Zealand broad-base, uniform-rate GST and its distributional effects, in an OECD context. This broader context enabled reflections on the implications for New Zealand if the GST comprehensive base were narrowed or multiple rates of tax were introduced in future.

The chapter considered five reviews of national tax systems: three in New Zealand over the last 20 years, a well-resourced one in the United Kingdom from 2006-2011 and a recent one in Australia on

48 Ibid., at 40.
49 Ibid.
50 New Zealand Treasury, supra n. 46, at 13-14, 19-20.
federal financial relations that reported in August 2020. There were common themes. In practice, all five reviews supported a broad-base, uniform-rate design for the VAT/GST. The three New Zealand reviews pointed to the revenue and neutrality advantages of the New Zealand GST broad-base and uniform-rate design. The United Kingdom and Australian reviews reported the revenue and neutrality drawbacks with narrower bases and multiple rates in their VAT/GST systems. Each of the five reviews emphasised the need to assess the impact of the whole tax and transfer system in their country on households, not expecting each tax or benefit instrument to achieve every objective. They agreed that a distributional objective of supporting poor families, for example, was better achieved through personal income tax and benefit systems, not through VAT/GSTs. Common issues discussed in background papers and/or final reports were: the merits of assessing distributional outcomes of tax-reform packages including VAT/GST proposals on a lifetime basis rather than a ‘snapshot’ yearly basis, and, if separate parts of packages were being analysed, measuring the burden of VAT/GSTs against expenditure rather than income, thus removing the unhelpful influence of savings.

The chapter then assessed the performance of the New Zealand GST using the latest OECD data and research and, broadly speaking, the summary results are:

1. In the forty-odd years to 2018, OECD countries have more than doubled their reliance on VAT/GST, which is by far the major general consumption tax;
2. In thirty-five years, New Zealand has trebled its reliance on general consumption taxation (the predecessor general consumption tax collecting around 10% of total taxation in the mid-1980s and GST collecting around 30% of total taxation today);
3. New Zealand’s reliance on GST revenue is now the highest or second highest in the OECD or an extended OECD group, with the results differing according to the year and measure used;
4. The New Zealand GST generated that high share of total revenue or GDP charging a relatively low standard VAT rate across most goods and services expenditure (the standard New Zealand GST rate of 15% is the sixth lowest standard rate among 35 OECD countries with a VAT);
5. Using an OECD rough guide of the neutrality and uniformity of a VAT/GST called the VAT Revenue Ratio (VRR), the New Zealand GST ranked the best among all 35 VAT systems in the OECD with the smallest policy and compliance gap and an unadjusted VRR of 0.99 (since 2010, the OECD unweighted average VRR has remained about 0.55, suggesting that, on average, about 45% of potential VAT revenue is not collected as a result of exclusions from the tax base, reduced rates of tax and non-compliance); and,
6. Recent research on consumption tax revenues in and after the global financial crisis of 2007-2009 argues that a broad-base, uniform-rate VAT in an economic crisis and in the period of adjustment afterwards, while revenues are returning to pre-crisis levels, may make VAT revenues more stable through that period of economic downturn, which is of profound importance to governments today in the midst of an economic crisis caused by the global COVID-19 pandemic.

And the implications for New Zealand if the GST comprehensive base were narrowed or multiple rates of tax were introduced in future? To anyone suggesting New Zealand can narrow its base or introduce multiple rates in a better way than other countries, my initial response, as a former New Zealand tax policy official who has experienced intense political lobbying, and on two occasions ugly abuse, is that it is well to remember New Zealand history: from 1933 to 1985 New Zealand had an anaemic and
awful general consumption tax with multiple rates and exemptions (by 1985, the New Zealand narrow-base wholesale sales tax had 19 rates ranging from 10 to 60 percent and raised just 10% of total taxation). My second response is to point to the latest research and international data, some of which we have considered or referred to in this chapter, including the following:

1. The high compliance and administrative costs of narrow bases that have been a focus of reviews of OECD VAT/GST systems generally and specifically in reviews of the United Kingdom, Australian and Canadian VAT/GST systems;

2. Without the barrier created by New Zealand's 'clean' GST, with its comprehensive base and uniform rate, many OECD countries continue to apply and extend a wide range of reduced rates (from 2018 to 2020, at least 15 OECD countries extended the application of their reduced VAT rates) and these boundary lines may have social welfare implications for the overall wellbeing of people, particularly if the line-drawing distorts production;

3. The potential high social cost of a narrow base distorting spending patterns is illustrated by the Mirrlees Review rough estimation in 2011 that if the United Kingdom extended VAT at 17.5% to most zero-rated and reduced-rated items it would, in principle, allow the United Kingdom government to make each household as well off as it was, leaving around £3 billion of revenue to spend in other ways;

4. The potential high and on-going revenue cost of a narrow base is illustrated by the Australian shrinking GST base, where the share of household spending subject to GST fell from around 60.8% in 2001-2002 to 55.4% in 2018-2019 (the escalating cost of exempt services such as health and education were a major part of the problem); and,

5. Although the latest in-depth research indicates that a broad-based uniform-rate VAT, such as the New Zealand GST, can produce a small degree of regressivity, using several VAT microsimulation models drawing on household expenditure microdata from household budget surveys in up to 27 OECD countries, the researcher concludes that countries are better advised to use their income tax or benefit system to achieve desired distributional goals than using reduced VAT rates (and, specifically, that the current New Zealand income-tested, family tax credit provides ‘far superior’ support to poorer households than reducing GST rates).

While the New Zealand GST has never been perfect and regularly requires maintenance, it seems clear that the New Zealand broad-base, uniform-rate design is a ‘virtue’ that should be retained. It is a less costly way of raising revenue and other government instruments can be used to achieve distributional, wellbeing and other objectives. To take one example, possible government responses to the serious and growing obesity problem in New Zealand that do not compromise the current design of the GST include targeted excise taxes, education and advertising programmes, regulation of food and beverage labelling and marketing and healthy food vouchers.