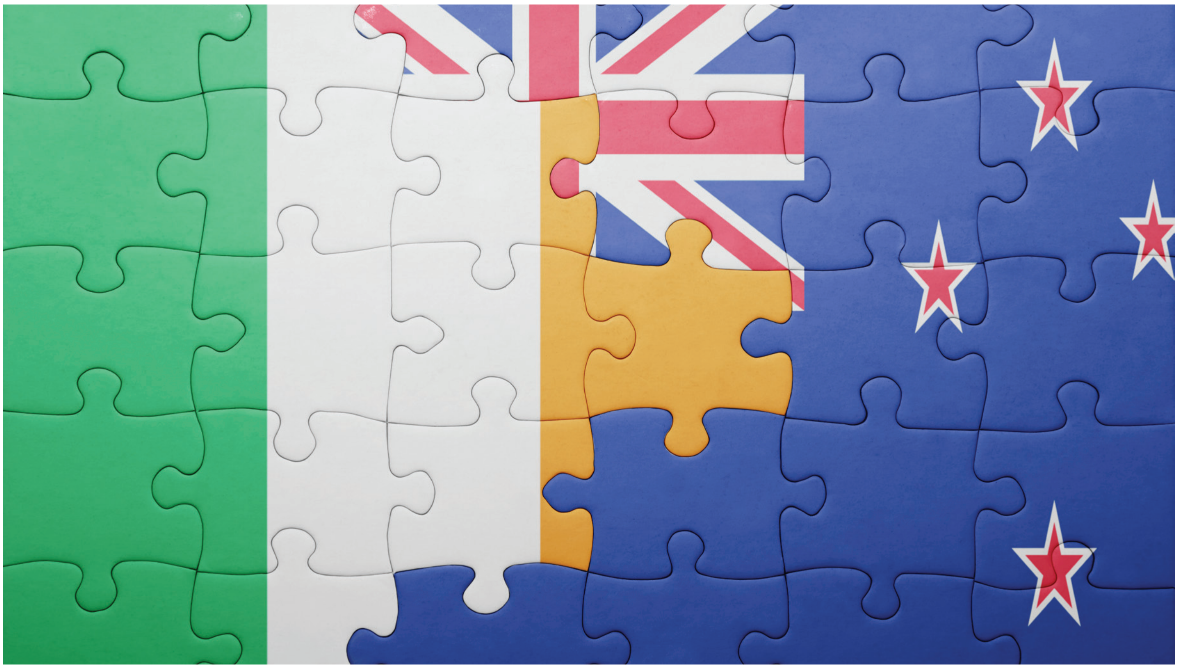
RESEARCH NOTE

BENCHMARKING NEW ZEALAND'S ECONOMIC PERFORMANCE AGAINST IRELAND'S

AUGUST 2023

BRYCE WILKINSON



THE NEW ZEALAND INITIATIVE

www.nzinitiative.org.nz

About the Author

Dr Bryce Wilkinson

Dr Bryce Wilkinson is Senior Research Fellow with the New Zealand initiative and Director of Capital Economics Limited, a Wellington-based economic consultancy. He worked in the New Zealand Treasury until 1985 when he joined a share broking firm to undertake capital market research. He set up Capital Economics Limited in 1996. He was a member of the government's 2025 Taskforce in 2010 and 2011. It was charged with assessing productivity growth and other policies capable of closing New Zealand's income gap with Australia by 2025. He has subsequently authored three research papers for the New Zealand Initiative on foreign investment issues and contributed to its 2018 submission on the government's proposed legislative changes.

About the New Zealand Initiative

The New Zealand Initiative is an independent public policy think tank supported by chief executives of major New Zealand businesses. We believe in evidence-based policy and are committed to developing policies that work for all New Zealanders.

Our mission is to help build a better, stronger New Zealand. We are taking the initiative to promote a prosperous, free and fair society with a competitive, open and dynamic economy. We develop and contribute bold ideas that will have a profound, positive, long-term impact.

Contents

Introduction 1
The GFC pulled the plug on the Irish success story 3
Population and geography are similar as between New Zealand and Ireland 5
Educational achievement – Ireland ahead on basics at age 15 (PISA scores) 5
Fiscal Indicators Ireland vs New Zealand 8
Corporate tax rates 10
NZ's hostility to Foreign Direct Investment 10
Ability to attract FDI – Ireland vs New Zealand 2011-2021 11
A summary overview table 14
Final Comment – FDI helps grow national income, but it is not all-important 14

Figure 1: Irish GNI and Modified GNI 1995-2022 3
Figure 2: Real household spending per capita in five countries, 1970-2022 4
Figure 3: Gross national income per capita: Ireland in the hunt but not a freak performer 5
Figure 5: Economic Freedom Ireland & NZ 1996-2023 8
Figure 6: General Government Outlays % of GDP 1990-2024 8
Figure 7: General Government taxation (% of GDP) 1990-2024 9
Figure 8: Government net financial liabilities 1997-2004 – Ireland and New Zealand 9
Figure 9: New Zealand's high corporate tax rate 10
Figure 10: NZ's extraordinarily restrictive FDI regime 11
Figure 11: FDI inflows relative to gross fixed capital formation - last decade 12
Figure 12: Smoothed inwards FDI flow relative to gross fixed capital formation 1970-2021. 12
Figure 13: Accumulated Inward Stock of FDI in 2021 (US$ per capita) 13
Figure 14: FDI Inward Stock in 2021 as % of GDP 13

Table 1: PISA Scores for Educational Attainment in seven countries in 2018 5
Table 2: New Zealand's and Ireland's Ranks for Economic Freedom (the lower the rank the freer) 7
Table 3: Summary of current statistics comparing New Zealand and Ireland 14
Table 4: Current significance of FDI in 11 countries 15

Introduction

In 2017, The New Zealand Initiative led 36 senior business leaders to visit Switzerland for this purpose. Critical points of difference that emerged were its direct and participatory democracy, devolved government, strong vocational training system and flexible labour market. Both its education system and its devolved government were instructive for New Zealand.[1]

In June 2023, The New Zealand Initiative led another business delegation to Ireland for the same purpose. This time, key points of difference that stood out were the importance of foreign direct investment and, again, an education system that provides the skills technology firms need to employ.

As background for the Irish trip, the New Zealand Initiative documented, without commentary, some conventional comparative economic statistics for New Zealand and Ireland.

An August 2023 version of this research note made this material more readily available. It augmented it with a brief commentary, more charts and some comparisons with Switzerland.

A key observation in that version was the very fast growth in recent years in Ireland's gross domestic product (GDP) and national income (GNI) per capita. Economy-wide labour productivity growth was extraordinarily high as a result. It looked like a great economic success story for Ireland, with its openness to foreign direct investment being a material point of difference, relative to many other countries, including New Zealand.

What that version of this research note missed was the degree to which these official aggregate statistics were incorporating the income from pre-existing offshore activities of multi-nationals whose head offices were based in Ireland. For example, in 2015, offshore earnings of multi-nationals enterprises (MNEs) attributed to intellectual property began to be recorded as Irish export income for the first time. This boosted Ireland's measured GDP and labour productivity, without affecting the domestic Irish economy.

The statistical (as distinct from economic) significance of such events is illustrated by the following comment from a February 2019 research paper, "What is behind aggregate productivity growth in Ireland? A granular approach", by Dr Javier Papa of the Irish Department of Business Enterprise and Innovation:

> …, the unprecedented GDP growth of 26 per cent in 2015 (later revised to 34 per cent) was mainly driven by a few MNEs relocating their entire balance sheets to

---

[1] See the press release at the following link and associated documents: https://www.nzinitiative.org.nz/reports-and-media/media/media-release-why-new-zealand-should-go-swiss/

> Ireland, containing intellectual property products. Associated with these relocations were significant increases in the contract manufacturing of goods exports attributable to Ireland. The unexpected increase in capital investment also had a knock-on effect on aggregate labour productivity, which went up by 23 per cent, and total factor productivity, which went down by 12 per cent, with respect to 2014 (CSO 2018).[2]

Ireland's Central Statistical Office (CSO) is now publishing productivity statistics for the foreign-owned multinational enterprise-dominated sector and the remainder of the Irish economy. It now estimates that labour productivity grew in 2015 by 79% in industries dominated by the former and by 4.1% in the remainder. Between 2000 and 2021 the average annual rate of productivity growth for market sectors dominated by domestic and other enterprises was a respectable but not spectacular 2.4% p.a.

What I had not appreciated until late in 2023 was the degree to which measured gross national income for Ireland has come in the last decade to include much income earned overseas by global companies whose head offices are resident in Ireland.[3] The investors who own those companies largely are not residents of Ireland.

This is significant because national income is most commonly interpreted as a measure of the income accruing to people living in Ireland. (GDP measures income from local production that accrues to residents and non-residents combined. Gross national income measures the net domestic and overseas income accruing to residents.[4]) Countries that fund a material proportion of local production from overseas typically have appreciably lower gross national income. The difference for Ireland is very significant.

What I had not appreciated the degree to which measured gross national income for Ireland has come in the last decade to include much income earned overseas by global companies whose head offices are resident in Ireland.[5] The investors who own those companies largely are not residents of Ireland. It is the extent of that (in fact) overseas-owned income for Ireland which makes Irish gross national income a much poorer indicator of the income accruing to people living in Ireland than it is for most other countries.

This anomaly induced Ireland's Central Statistic Office to publish national income estimates for Ireland that excluded this MNE effect. It called these estimates "modified national income".

---

[2] https://enterprise.gov.ie/en/publications/publication-files/research-paper-what-is-behind-aggregate-productivity-growth-in-ireland.pdf

[3] An April-May 2023 article "by UK-based Julian Jessop alerted me to the magnitude of this problem when I came across it. See: [Are Irish incomes really twice those of the UK? – Plain-speaking Economics (julianhjessop.com)]

[4] The IMF used to call GNI GNP gross national product.

[5] An April-May 2023 article "Are Irish incomes really twice those of the UK" by UK-based Julian Jessop alerted me to the magnitude of this problem when I came across it. See [Are Irish incomes really twice those of the UK? – Plain-speaking Economics (julianhjessop.com)]

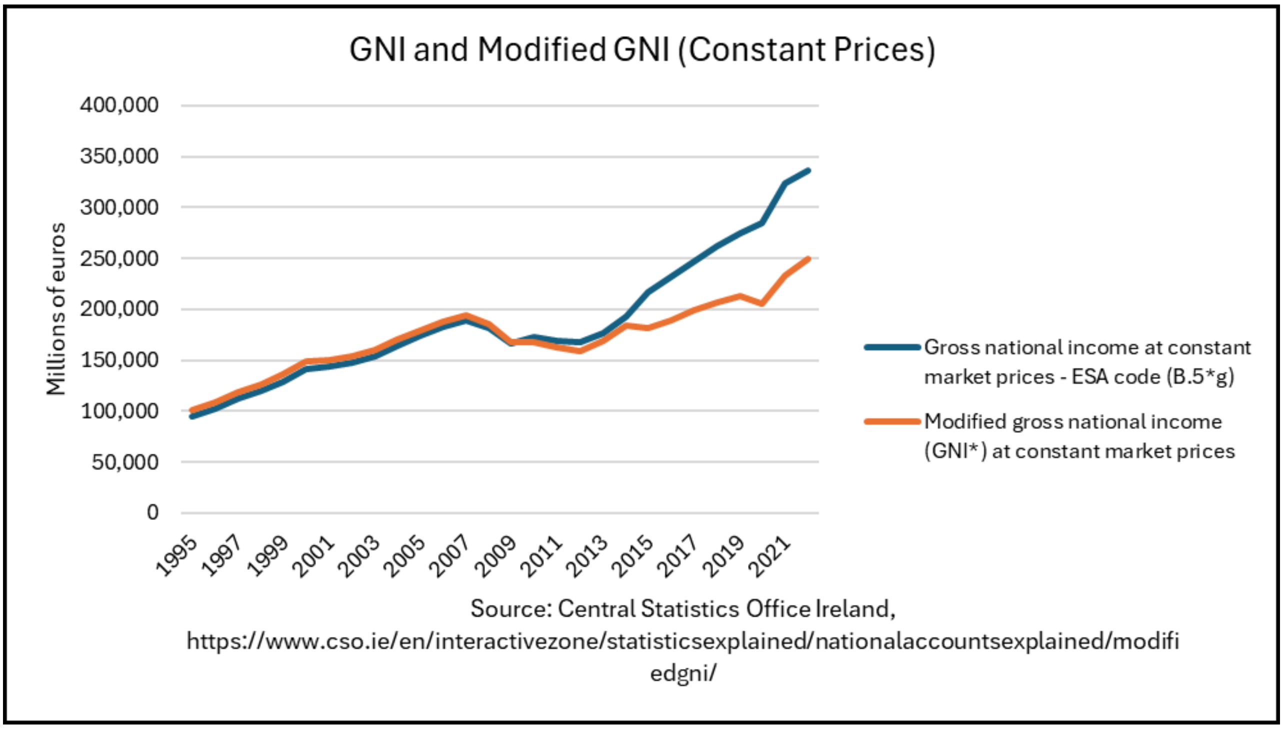
The next section of this research note is new. It documents the scale of the statistical differences.

The GFC pulled the plug on the Irish success story

The new statistics revealed an increasingly dramatic difference between estimates of modified national income and national income for Ireland from 2009. The extent of this divergence since 2009 is shown in Figure 1.

Ireland's Central Statistics Office also explained the major reasons for the divergence in 2023.[6]

Figure 1: Irish GNI and Modified GNI 1995-2022



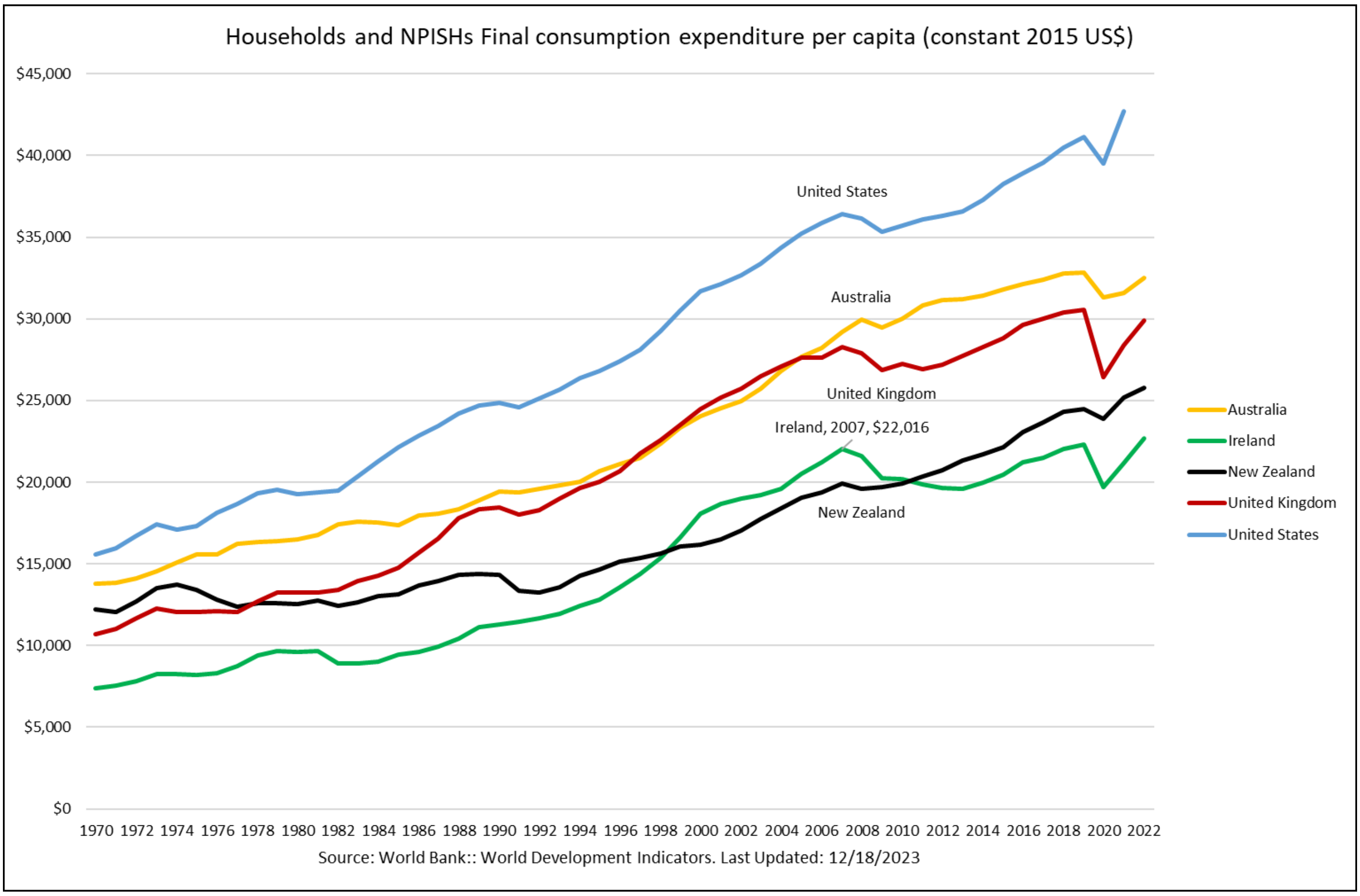
The upshot is that GNI in constant prices in 2021 was 39% higher than modified GNI in constant prices. That makes all GNI comparisons with other countries grossly misleading if the intention is to assess how well Irish citizens or households have been faring economically in the 2020s.

For example, whereas GNI per capita in the UK was only 61% of the Irish level in 2021, it was 4% *higher* than the Irish level for modified GNI.

[6] Central Statistics Office, "Modified GNI" https://www.cso.ie/en/interactivezone/statisticsexplained/nationalaccountsexplained/modifiedgni/

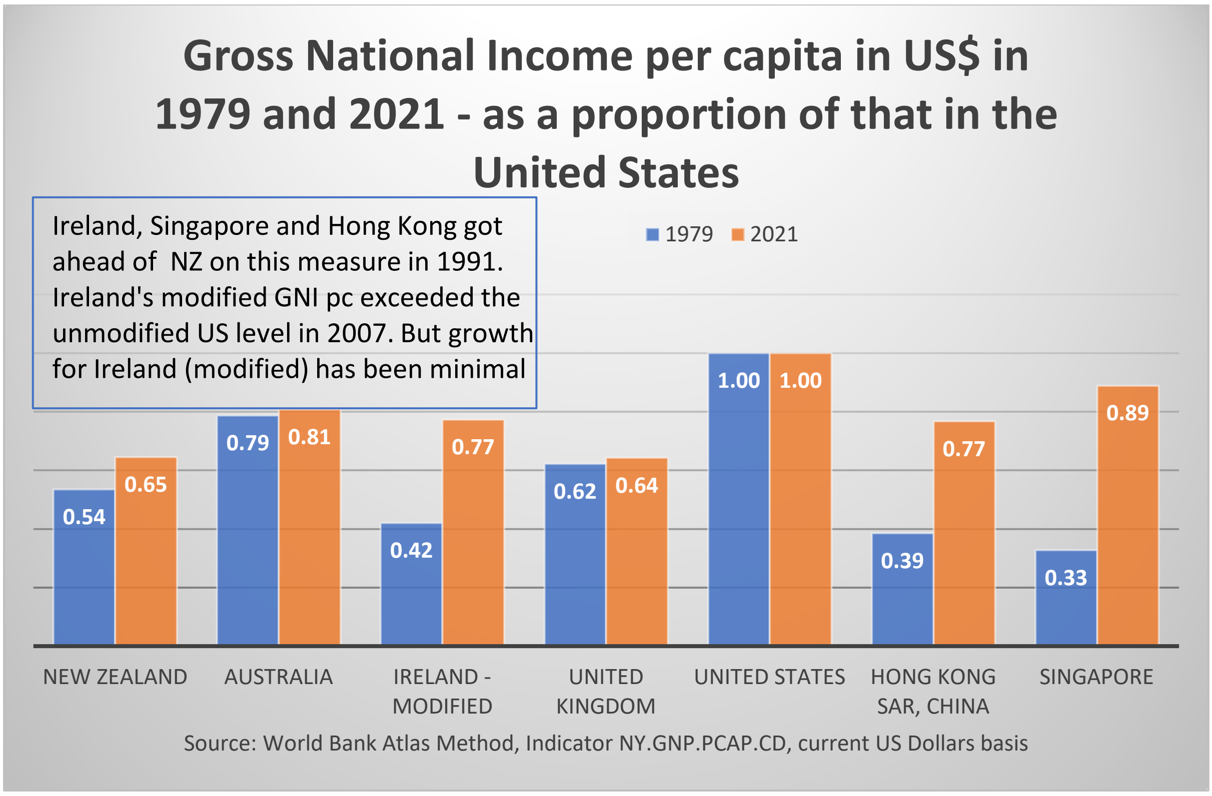
World Bank statistics comparing real household consumer spending per capita across countries show that Irish households are still lagging. Ireland's growth rate averaged an impressive 4.5% p.a. from 1982-2008. Its level surpassed New Zealand on this measure in 1998. But Ireland's material living standards in 2022 are barely higher than in 1998 on this measure. See Figure 2.

Figure 2: Real household spending per capita in five countries, 1970-2022



Whereas Ireland is less prosperous than the UK on the above household consumption per capita basis (Figure 2), it is scoring above the UK on a modified GNI basis (Figure 3). The different exchange rate conversions used for each comparison might be a factor.

Figure 3: Gross national income per capita: Ireland in the hunt but not a freak performer



Population and geography are similar as between New Zealand and Ireland

New Zealand and Ireland each have 5 million people. Farming is important in both countries. New Zealand's land area is over 3.5 times greater. New Zealand's population density is 20 people per square kilometre compared to 72 for Ireland.

(For further contrast, Switzerland's population is 8.8 million. Its population density is 223 per square kilometre because its land area is less than 60% of Ireland's land area.)

In both New Zealand and Ireland 53-54% of their populations are of working age. (In Switzerland 52% are of working age, according to World Bank estimates.).

Educational achievement – Ireland ahead on basics at age 15 (PISA scores)

The Programme for International Student Assessment (PISA) regularly tests the skills and knowledge of around 600,000 15-year students from different countries, mainly in science, reading and mathematics. Ireland significantly outscored New Zealand for reading and mathematics, although New Zealand scored better than Ireland on science. Switzerland outscored New Zealand for mathematics but not for reading or science.

Table 1: PISA Scores for Educational Attainment in seven countries in 2018

Averages for age 15 years PISA by ALL students, 2018 survey

Country	Overall reading	Overall mathematics	Overall science
Australia	503	491	503
Ireland	518	500	496
Japan	504	527	529
New Zealand	506	494	508
Switzerland	484	515	495
United Kingdom	504	502	505
United States	505	478	502
NZ's standard deviation	2.0	1.7	2.1

Source: OECA Skills Survey 2018, downloaded 1 August 2023

Those on the New Zealand Initiative's mission to Ireland were given reason to think that the post-school education system in Ireland was much more focused than New Zealand's on teaching the skills needed for Ireland's vibrant, extensive and innovative technology sector.

The broad source of prosperity – economic freedom

A country cannot prosper if its people are not free to sell their labour, work hard, pocket the proceeds, build their skills, save and invest, knowing they will be secure in their own property and free to trade for mutual benefit with others, domestically and internationally.

There is much that government needs to do well if it is to create such an environment.

Two North American think tanks have developed measures of how well countries do in these respects.[7] The Fraser Institute calls its index "Economic Freedom of the World". The Heritage Foundation calls its measure "Index of Economic Freedom".

The measures are imperfect because of quantification problems. Different attributes cannot be weighted with any precision. Not much should be read into small differences in scores across countries. But it is clear that countries with markedly low scores for economic freedom are overwhelmingly low-income countries, and vice versa.

In 1985, neither Ireland nor New Zealand ranked very highly for economic freedom. The Fraser Institute ranked them as 17th and 20th, respectively. The US ranked 3rd. As shown in Figure 1, its income per capita was much higher than that of Ireland or New Zealand.

7 New Zealand has ranked very near the top of the world on both indexes since its economic liberalisation measures of the late 1980s and early 1990s. So have Singapore and Hong Kong.

By 1995 New Zealand was 3rd and Ireland 8th on Fraser's measure. Both countries had liberalised appreciatively.

New Zealand retained that 3rd ranking for many years – behind Singapore and Hong Kong. (Figure 1 includes the income growth performance of those two countries in part for this reason.)

But Ireland has recently moved ahead of New Zealand on the Heritage Foundation's measure (see Table 2). Its 2023 report has Ireland in 3rd slot (behind Singapore and Switzerland in that order), with New Zealand 5th, behind Taiwan.

Ireland was ranked freer than New Zealand on property rights, fiscal measures, freedom to sell one's labour, monetary freedom and investment freedom.

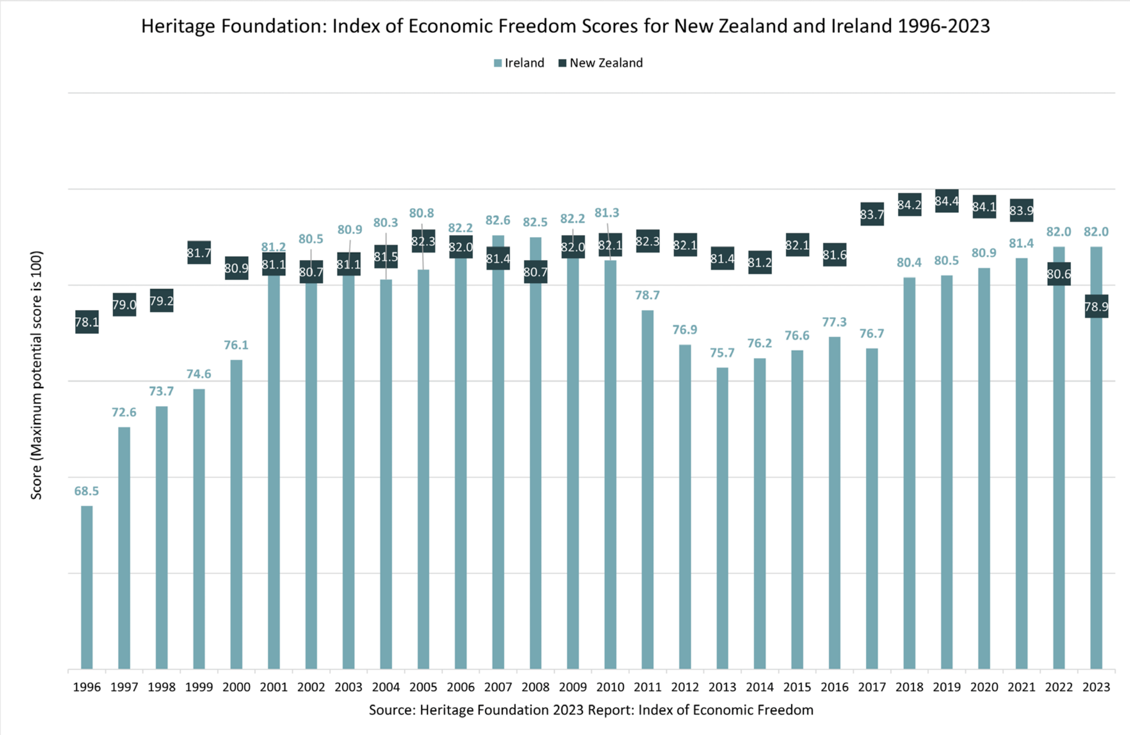
It is freer on fiscal measures because strong income growth has reduced tax burdens.

Table 2: New Zealand's and Ireland's Ranks for Economic Freedom (the lower the rank the freer)

Statistic	Ireland	New Zealand	Notes
World Rank for Economic Freedom	3	5	Heritage Foundation 2023 Report
Ranking of Economic Freedom Components			
Property Rights	16	26	Ireland ahead
Judicial Effectiveness	14	10	NZ ahead
Govt Integrity	16	3	NZ ahead
Tax Burden	92	152	Ireland ahead
Government Spending	58	130	Ireland ahead
Fiscal Health	38	69	Ireland ahead
Business Freedom	6	3	NZ ahead
Labor Freedom	53	10	Ireland ahead
Monetary Freedom	27	59	Ireland ahead
Trade Freedom	28	2	NZ ahead
Investment Freedom	2	42	Ireland ahead
Financial Freedom	17	3	NZ ahead
World Rank for Economic Freedom	3	5	Ireland ahead

Ireland's scores for economic freedom have been more volatile than New Zealand's since the mid-1990s (Figure 4).

Figure 4: Economic Freedom Ireland & NZ 1996-2023



Fiscal Indicators Ireland vs New Zealand

Ireland has managed to use its strong income growth to reduce the share of government spending and taxation relative to GDP. This is shown in Figures 5 and 6 below.

Figure 5: General Government Outlays % of GDP 1990-2024

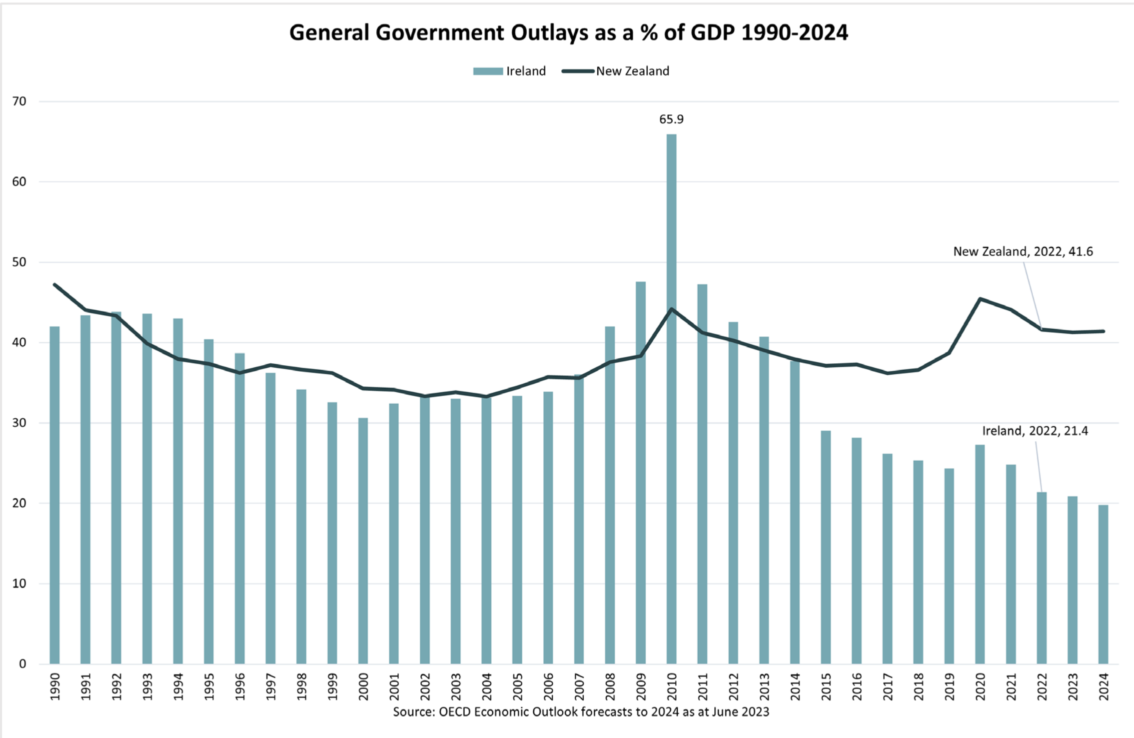
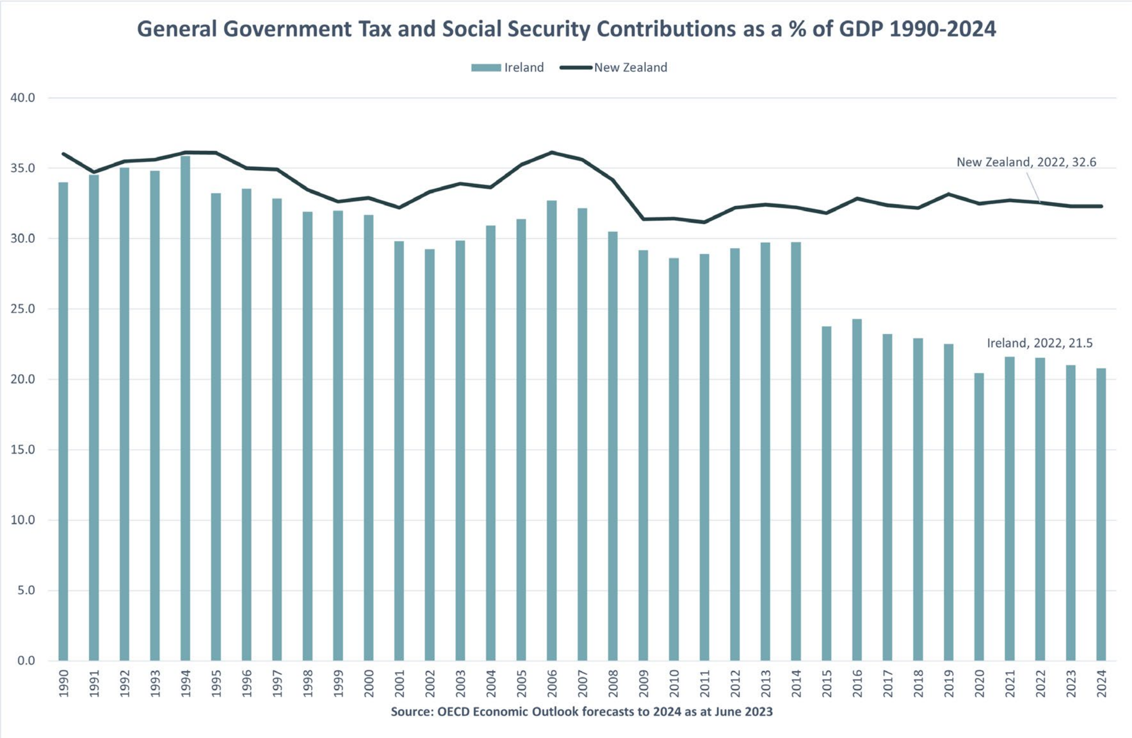
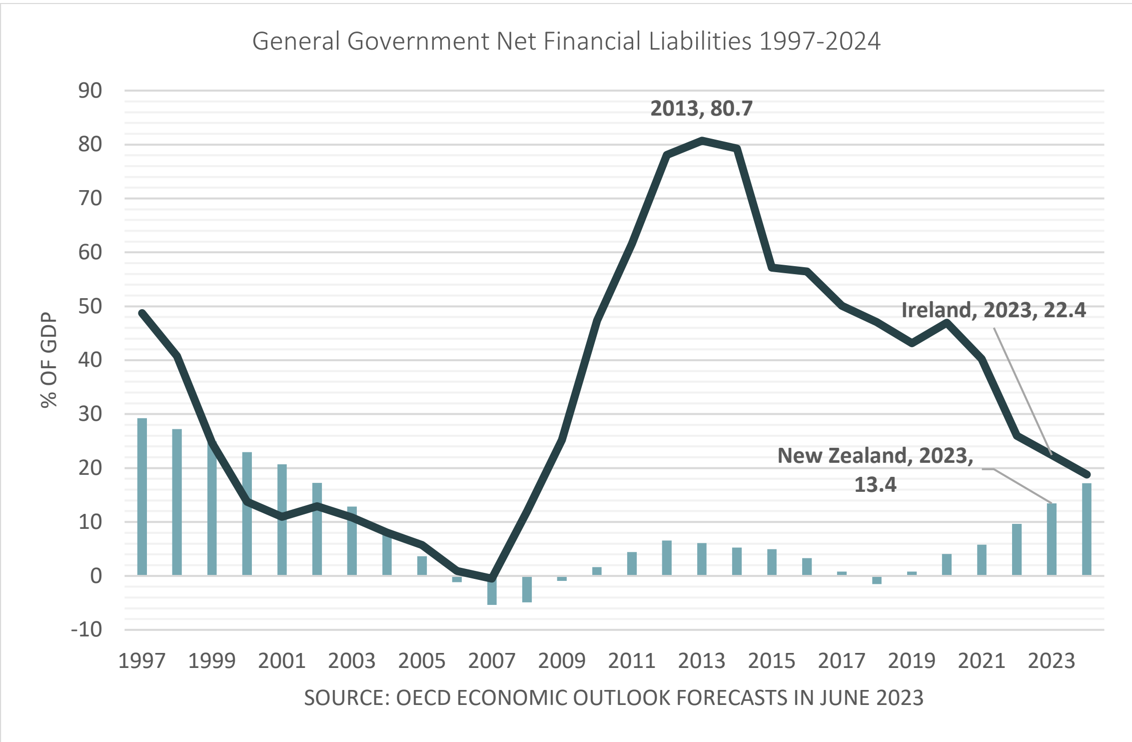


Figure 6: General Government taxation (% of GDP) 1990-2024



Until recently, New Zealand has done a far better job of keeping the public debt under control than Ireland. But their debt ratios have moved in opposite directions since 2018 (Figure 7). The two countries are now on a par.

Figure 7: Government net financial liabilities 1997-2004 – Ireland and New Zealand



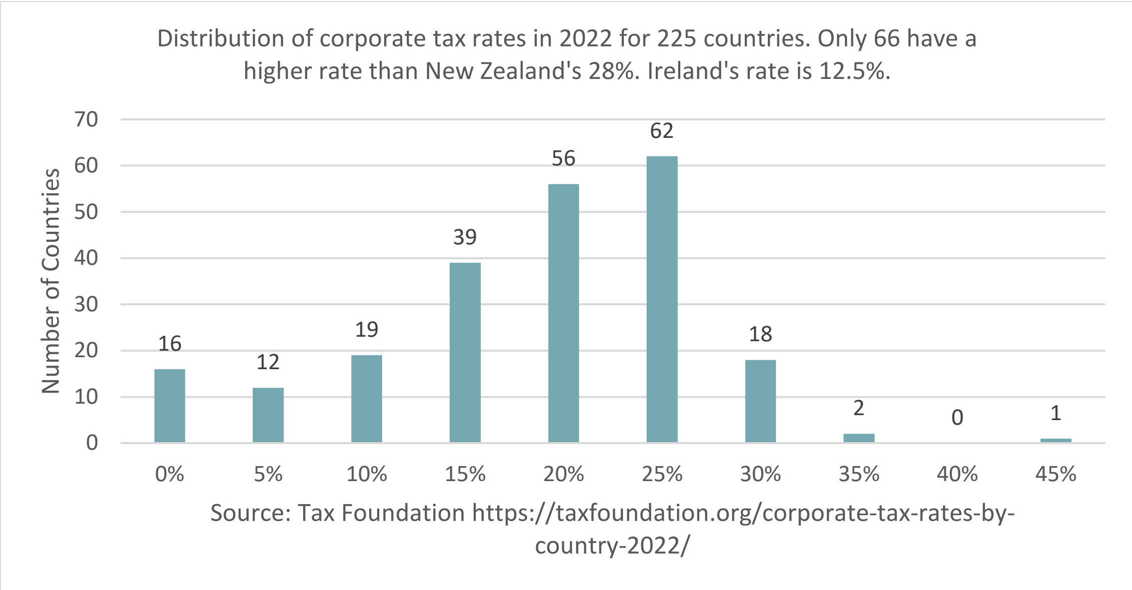
The rest of this note's comparisons focus on investment freedom differences.

The four countries ranked ahead of New Zealand for economic freedom have all made their economies attractive to investors, including overseas investors.

Corporate tax rates

New Zealand's corporate tax rate is 28%, Ireland's is 12.5%. The corporate tax rates for Singapore, Switzerland, and Taiwan are reported for 2022 by the US Tax Foundation as being 17%, 19.7% and 20%, respectively. New Zealand is an outlier in this company. Figure 8 shows that, at 28%, New Zealand's corporate tax rate is towards the top end of the range for 225 countries. Only 66 had a higher rate than New Zealand.

Figure 8: New Zealand's high corporate tax rate



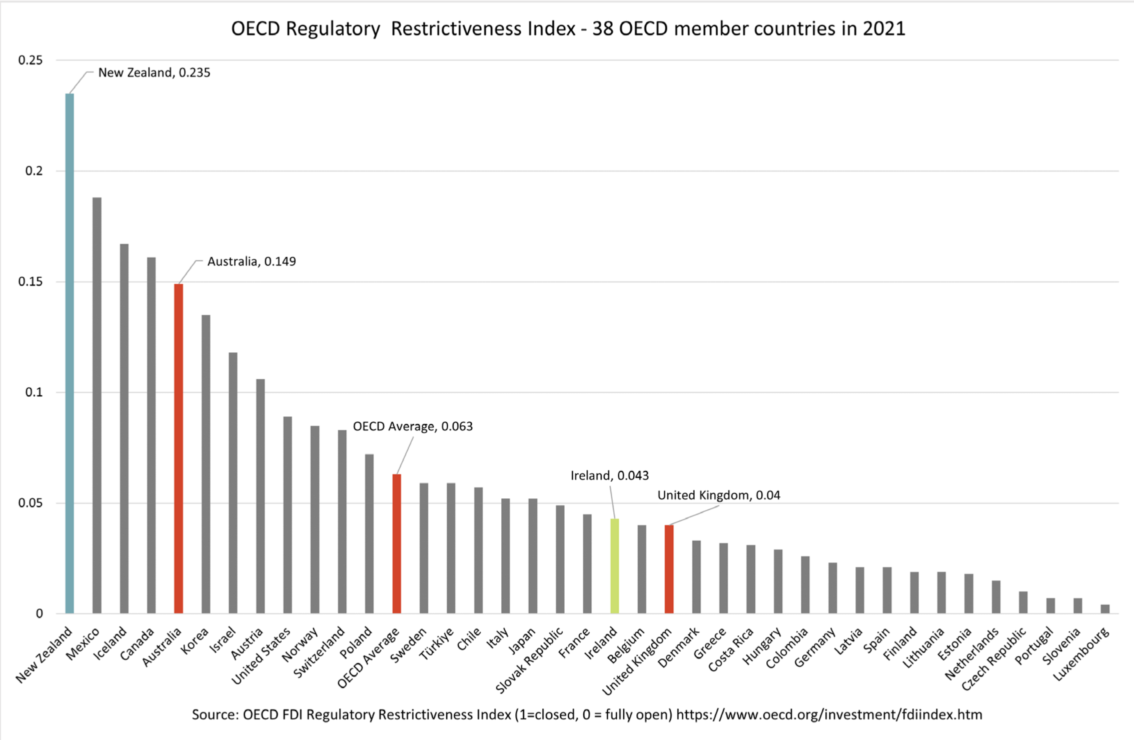
NZ's hostility to Foreign Direct Investment

The OECD ranks New Zealand as the least open to Foreign Direct Investment (FDI) of all its 38 member countries (Figure 9).

This matters because foreign direct investment allows New Zealanders to access foreign proprietary knowledge, foreign markets and global risk capital.

Note that Ireland is not at the extreme on this measure. Alongside the UK, is not far from the middle of OECD member countries.. New Zealand is at the extreme end of restrictiveness.

Figure 9: NZ's extraordinarily restrictive FDI regime



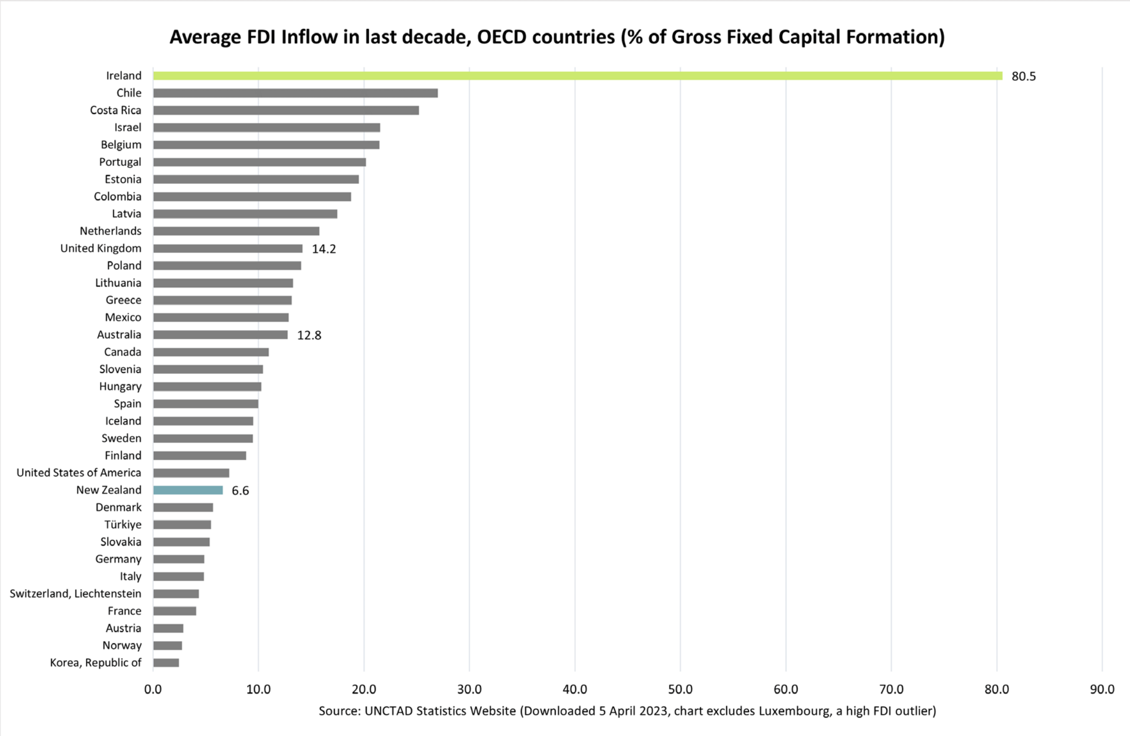
Ability to attract FDI – Ireland vs New Zealand 2011-2021

Ireland’s ability to attract FDI relative to its spending on gross fixed capital formation has outstripped that of every other member country of the OECD in the decade to 2021, bar Luzemburg. Its annual inflow has averaged 80.5% of GDP compared to a 6.6% average for New Zealand (Figure 10).

Readers should note that FDI typically involves a New Zealander selling an asset (e.g., land or equity in a company) to a foreigner. This is an ownership transfer. It is not capital formation; the transaction does not involve constructing or importing a building, plant or machinery. Nor does it otherwise add to the stock of fixed capital in New Zealand.

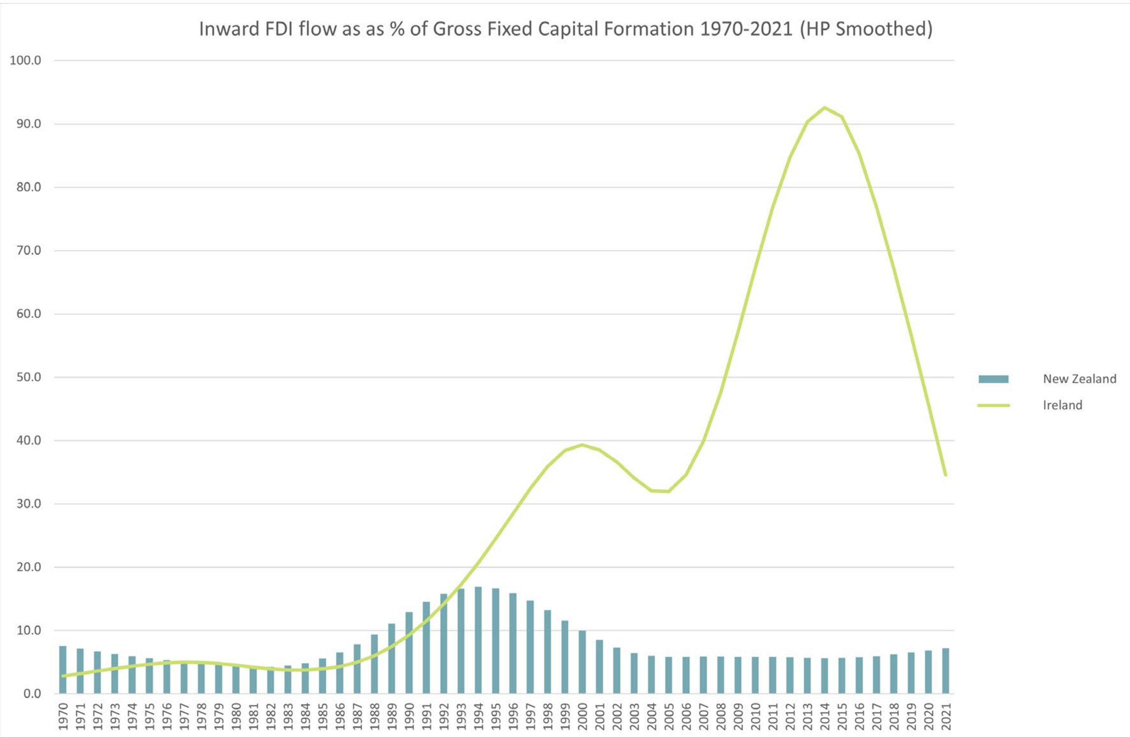
An FDI purchase may be followed by spending on capital formation, but the statistics in Figure 10 do not measure that. Instead, they merely show the scale of the flow of inward FDI relative to that portion of economic activity in the country.

Figure 10: FDI inflows relative to gross fixed capital formation - last decade



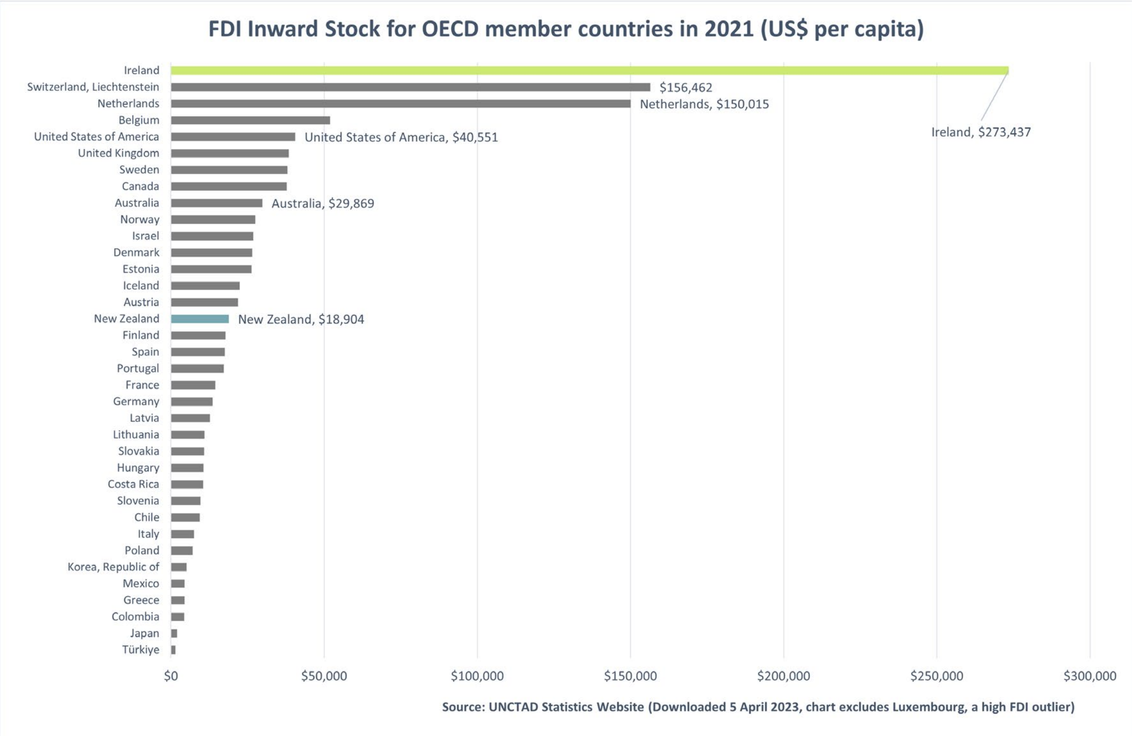
New Zealand's privatisation programme in the early 1990s saw its inward FDI surge temporarily. Ireland's surge was much stronger. The annual statistics are very volatile. Figure 11 smooths the annual series so as to bring out the difference in the trends.

Figure 11: Smoothed inwards FDI flow relative to gross fixed capital formation 1970-2021



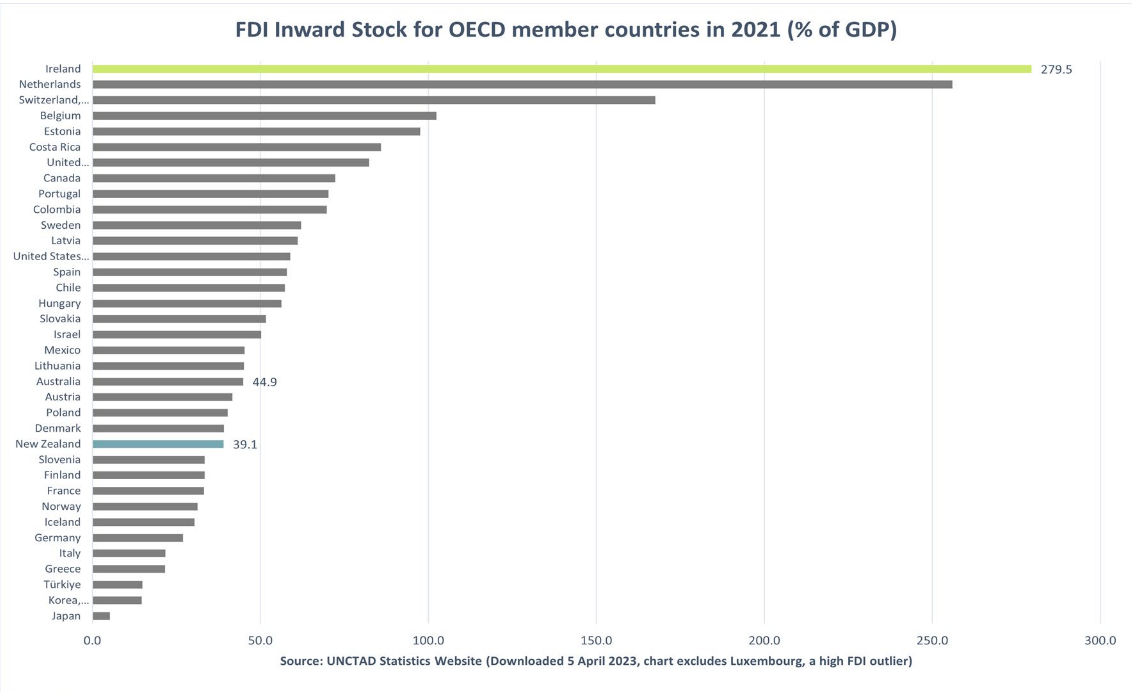
Ireland's accumulated stock of FDI in 2021 was a staggering US$273,436 per capita, according to UNCTAD statistics. New Zealand's was much lower at US$18,904 (see Figure 12).

Figure 12: Accumulated Inward Stock of FDI in 2021 (US$ per capita)



For completeness, the following chart expresses the same FDI inward stocks in 2021 as a percentage of GDP instead of in real per capita terms.

Figure 13: FDI Inward Stock in 2021 as % of GDP



A summary overview table

Table 3 summarises the above comparisons.

Table 3: Summary of current statistics comparing New Zealand and Ireland

Some Background Statistics for the Republic of Ireland and New Zealand			
Statistic	Ireland	New Zealand	Notes
Population (million)	5.0	5.1	2021 statistics
Land Area (000 sq km)	70	268	Google search
Population density (per sq km)	72	20	Google search
Household consumption per capita	$22,704	$25,793	World Bank 2022,2015, US$
Gross national income per capita (US$)	$58,966	$49,090	World Bank 2022 US dollar (Atlas Method), Modified GNI for Ireland, author's calcuulations
Gross Domestic Product per capita (US$)	$128,343	$52,242	OECD current price basis, current purchasing power parity basis, 2022 values. See chart
Labour productivity GDP per hour (US$)	$136	$104	OECD estimates for 2021, see chart
Top corporate tax rate	12.5%	28%	US-based Tax Foundation, see chart of global distribution
Rank for most restrictive FDI regime in OECD	20	1	NZ most restrictive of 38 OECD member countries, see chart
Gross fixed capital formation (% of GDP)	23.3%	23.9%	World Bank, 2022 Calendar year, see chart
FDI inflow as a % of GFCF (average last decade)	81	7	UNCTAD estimates, see chart
Stock of inwards FDI (% of GDP)	280%	39%	UNCTAD estimates for 2021, see chart
General government spending (% of GDP)	23%	42%	OECD estimates in November 2022, see chart
General Government tax receipts (% of GDP)	21%	33%	OECD estimates in November 2022, see chart
General Government net financial liabilities (% of GDP)	31%	13%	OECD forecasts for 2023, see chart
Net international Investment Position (% of GNP for Ireland)	-187%	-48%	Ireland's central statistical office, June 2022, SNZ for NZ (% of GDP)
World Rank for Economic Freedom	3	5	Heritage Foundation 2023 Report

Final Comment – FDI helps grow national income if it is done well, but it is not all-important

Ireland has done much less well for its resident citizens than is indicated by the conventional international income comparisons. Until the GFC its growth performance was particularly impressive.

How well a country uses FDI to allow its native residents to tap into international know-how and capital is important. While there is much padding in Ireland's statistics for GDP and GNI

Table 4 shows that prosperous countries today with high levels of economic freedom have taken different paths with respect to FDI to achieve their prosperity.

FDI has played a much bigger role in Hong Kong, Singapore, Ireland and Switzerland than in most other countries. FDI today is much less significant in either of two other "Asian Tigers" – Taiwan or Korea.

Table 4: Current significance of FDI in 11 countries

Country	Inward FDI stock in 2021 US$ per capita	Inward FDI stock in 2021 % GDP	Annual average 1970-2021 FDI Inflow/Gross Fixed Capital Formation
Australia	$29,869	44.9	8.1
China, Hong Kong SAR	$267,741	546.1	64.3
China, Taiwan Province of	$4,859	14.8	2.8
China	$1,429	11.9	5.6
Ireland	$273,437	279.5	30.4
Korea, Republic of	$5,131	14.6	2.5
New Zealand	$18,904	39.1	7.9
Singapore	$340,407	521.1	46.8
Switzerland, Liechtenstein	$156,462	167.5	7.7
United Kingdom	$38,474	82.4	12.2
United States of America	$40,551	58.9	4.6

Source: UNCTAD Statistics Website (Downloaded 5 April 2023)

The New Zealand Initiative is an independent public policy think tank supported by chief executives of major New Zealand businesses. www.nzinitiative.org.nz | +64 4 499 0790 | info@nzinitiative.org.nz

Research Note
ISSN 2816-0347