Fall 2018

'Once Were Warriors', Now We're Unemployed: A Solution for New Zealand's Persistent Unemployment

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Senior Project Submitted to
The Division of Social Studies
of Bard College

by

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Annandale-on-Hudson, New York
December 2018

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Abstract

The economic policies of New Zealand have tended to reflect the economic orthodoxies of academia at any given time. Given that adherence to economic 'truth' as espoused by neoclassical economics is supposed to engender allocative efficiency and general equilibrium, this paper takes just one variable - unemployment - and explores why its market has continually failed to clear. Both demand and supply side factors are explored through a survey of the literature on employment determination, and a theoretically robust solution is proposed in the tradition of Modern Money Theory.

Keywords: *New Zealand, unemployment, Public Service Employment, Jobs Guarantee, MMT*

JEL classifications: *B5, E24*

PLAGIARISM STATEMENT

I have written this project using in my own words and ideas, except otherwise indicated. I have subsequently attributed each word, idea, gure and table which are not my own to their respective authors. I am aware that paraphrasing is plagiarism unless the source is duly acknowledged. I understand that the incorporation of material from other works without acknowledgment will be treated as plagiarism. I have read and understand the Bard statement on plagiarism and academic honesty as well as the relevant pages in the Student Handbook.

Jack English

Acknowledgements

Thank you mum and dad. Even after years of economics I still don't understand the cost-benefit analysis behind parenting; I appreciate the unconditional love.

To the department: Thank you for willing to step beyond your roles as professors and offer advice and support when needed, which was especially needed as a transfer student. I have enjoyed every class, and will miss being constantly intellectually challenged. Special acknowledgments go to Professor Tcherneva for her guidance on the project and beyond, and Professor DeSilva for providing the opportunity to conduct research over the past summer (and for being the only person in the Hudson Valley I can discuss the gentleman's game with!). Professors Mitra and Wray, I enjoyed your classes, and attempting to reconcile your respective micro and macro classes in the same semester provoked at times humorous dissonance.

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Introduction

Unemployment is a notion familiar to even the most casual observer of the news and economy. To the majority of the population it is philosophical - a shift between 4% and 5% in the rate means very little to those with a job - yet to an unfortunate few it is the source of continual material and mental hardship. The perception of unemployment from the academic discipline of economics has varied over the past three centuries, but for the core modern orthodoxy its incidence is not only acceptable, but natural. As a concept on paper and in analysis - far removed from its real world effects - it is theorized to meander this way and that, and economists have used this abstraction to toy with it in all sorts of ways, even projecting onto its victims defects in nature and fortitude. The failure to banish it permanently, as we have had the means and knowledge to do for almost a century, has been justified in myriad ways, these justifications facing little external scrutiny due to the lack of social clout among the unemployed.

This paper confronts one question with many implications: is unemployment 'natural'? If so, why must a portion of the population be kept idle, and if not, given its pervasion in capitalist economies, upon whom does the responsibility lie to eliminate it? The empirical case used herein is New Zealand, a country that has been, and remains, emblematic of contemporary economic orthodoxies. The progression of unemployment in New Zealand (Figure 1.1), especially in the period post-WWII to today, illustrates how closely political decision-making has shadowed economic academia, with inescapable ramifications for high-street and the family home. While at times the New Zealand government was an active promoter of full employment, at others it has treated unemployment as a useful policy tool to affect other variables in the economy. Finding a policy approach that both encourages job creation whilst supporting the state's myriad other social and economic objectives is thus the objective of this paper.

Chapter 1 provides an outline of New Zealand's social and economic history. Particular attention is paid to patterns of trade and industry, and the remarkable events of the 1980s and 1990s that saw neoliberalism thrust unapologetically upon the everyday Kiwi. Chapter 2 embeds this historical progression within an intellectual framework of economics. Beginning with Smith, Ricardo and Say, we observe how various individuals and schools of thought conceptualize economic rights and reality, with an emphasis on unemployment. Chapter 3 then applies the various theories of employment determination onto the New Zealand case, considering both supply and demand side solutions to the country's persistent unemployment, finally putting forward a humane and theoretically robust policy proposal.

Chapter 1

> "Over 2 million people know what it is to be a New Zealander. For some it means uncongested living in a house on a quarter-acre section; a secure job during the week and rugby on the weekend; free education and free medical benefits; the assurance of an old age cushioned by the State. For others, it means a fair share of the national wealth; freedom from corruption and poverty and racial ugliness; an unhurried tempo of living; clean air and sunshine; paddocks white with sheep; an unobstructed view of mountain and bush" (Stones, 1959, p. 9).

Much has changed since Desmond Stones asserted what it was to be a New Zealander over 50 years ago. While most New Zealanders today recognize that the characteristics he described are *metaphorically* bound to the Kiwi identity, far fewer would identify them in their day-to-day lives. Rugby remains as important as ever, but ask the average New Zealander today if they feel endowed with a 'fair' share of the country's income, the possibility of obtaining a quarter-acre section, or the absence of poverty and ethnic tension, and the likely response would be a raised eyebrow. To those who feel secure in their economic and social standing, the condescending reassurance echoes the late John Clarke's (satirist and social commentator) anthem: 'We don't know how lucky we are'. But one must ask, who is 'we'? As much as New Zealand prides itself on modelling egalitarianism, there is little denying that opportunities and outcomes are not granted equally, a notion supported by the results of the 2017 election. The left and right blocs each received roughly half of the vote, with the left emerging victors on an unimaginative mandate of 'A Fresh Approach'.

Several issues galvanized the raucous left-bloc. Despite the dominant Labour party switching leaders after its advertisements had already been published, the standing down of the Green Party co-leader following welfare fraud admission, and constant infighting between members of the bloc on national television (culminating in allegations of racism between party leaders), much of the population felt the milquetoast message of 'change' resonatory. Poorer Māori and Pasifika residents felt nine years of the center-right National Party's governance had left them reliant on a dilapidated state-housing stock, and young New Zealanders of all stripes found themselves priced out of the housing market, blamed by an older generation (enthralled with their capital gains) who claimed that millennials simply indulged in too many lattes and "smashed avocados on toast" (Levin, 2017).

Then incumbent Prime Minister Bill English and his Cabinet found it difficult to deflect the mounting evidence of inequality: average Auckland house prices topped NZ$1m while home ownership

rates fell to a 66 year low, almost 100,000 youths not in education, employment or training, an evident growing incidence of homelessness, and the persistence of geographical and ethnic disparities. Capitalizing on this unease, Jacinda Ardern cobbled together a three party coalition with a platitudinous agenda of material change, whilst proposing very little that attacked the roots of New Zealand's deep-rooted economic malaise.

~1800 - 1945

Historians generally agree that New Zealand, having geographically split from Gondwana some 80 million years ago, was the last land mass discovered by humans. Navigating by canoe down from Polynesia, the Māori are thought to have inhabited Aotearoa (New Zealand) around 1300 AD, dispersing mostly throughout the North Island. They lived in communal tribes (*iwi*), with each adhering to traditional Polynesian custom and theism in their own manner, further subdividing into clans (*hapū*). All members would contribute to subsistence, whether through hunting and gathering, or especially later on, gardening, where, "women planted, weeded, fetched and carried while the men dug the ground" (Smith, 2005, p. 18). Māori lived uninterrupted - albeit with significant internal conflict - until the 17th century, whereupon Dutch explorer Abel Tasman arrived after traversing the now eponymous sea. Four Dutchmen were killed in an aquatic skirmish with the Māori, and Tasman left without setting foot on land.

It took another century for Captain James Cook to initiate a colonization effort. Buoyed by victory in the Seven Years' War, Britain commissioned a series of oceanic voyages - three for New Zealand itself - to uncover resource rich lands. Cook's interactions with the Māori fared better than Tasman's, and as one historian romanticized it, "for the first time, the two great streams of race and culture in New Zealand, Polynesian and European, came into confluence" (Begg, 1990, p. 23).

Foreign whalers began frequenting New Zealand's shores just before 1800, prior to any colonial settlement push. Their relationship with the Māori was transactional; the ship's captains would purchase supplies from the Māori, while the whalers would avail themselves of Māori women, often engaging in 'three week marriages' where the woman would board the ship for such a time in return for weapons, clothing, and other exotic goods. This earned port town Kororāreka the title 'Gomorrah, scourge of the Pacific'. By the 1830s, Christian missionaries were concerned about the chaotic setting that was deteriorating through inter-tribal warfare, and began pressuring British bureaucracy to initiate colonization. First came the private 'New Zealand Company', who planned to buy cheap plots of land and build ambitious settlements that appealed to Britons seeking an idyllic semi-rural landscape, one that sharply contrasted with the rapid urbanization occurring in Britain.

Alarmed by the possibility of businesses staking sweeping land claims, the British government sent an official envoy with the intention of gaining sovereignty over the land with the cooperation of Māori chiefs. Soon after arriving, William Hobson drafted the Treaty of Waitangi, thereafter signed by over 40 Māori tribal leaders. The varying interpretations of the respective English and Māori versions of the treaty, and the legality of subsequent British land claims, has been the central source of Māori and Pākehā (New Zealanders of European descent) tension in New Zealand's history, with judicial cases still being heard by the Waitangi Tribunal today.

The New Zealand economic story is traditionally one of exports, and the turbulence that comes with relying on uncontrollable factors for demand of its goods. Early settlers quickly learned that moving to the South Pacific was no 'get-rich-quick' scheme. Almost exclusively subsisting on agriculture, the mainly English immigrants found an unyielding environment, with few of the amenities enjoyed in British civility. Financing the costly redevelopment of the bushy and mountainous South Island into arable pasture, as well as the ongoing wars against Māori tribes in the North Island, required a tight relationship to English capital markets. The mid-19th century saw exports dominated by foodstuffs sent to the New South Wales colony, but by 1860 wool constituted the absolute majority of exports, much of it shipped to Great Britain. There followed a decade of gold-rush induced mania, before trade settled back into the long-run normalcy of agriculture. Beginning at around one million pounds of wool exported in 1853, by the Second World War New Zealand was shipping out some 400 million pounds of wool each year.

Wool prices began falling in the late 1800s as the global economy receded, yet New Zealand found salvation in the refrigerator, allowing lamb and dairy to be frozen and shipped across the globe. Further technological developments - for instance the centrifugal separator - stimulated agricultural growth, and frozen products continued to make up the majority of the economy throughout the 20th century. Owing to limited domestic industry that failed to provide many household 'necessities', imports generally outstripped exports, yet the two moved in relative concert owing to foreign exchange constraints (Figure 1.2). Problematically, New Zealand remained reliant on just a few Commonwealth markets for trade: from 1875 to 1914 roughly 80% of the country's total exports went to Britain, and by 1932, this had risen to almost 90% (McLintock, 1966). With regard to imports New Zealand was relatively more diversified, yet over half came consistently from Britain in the interwar period.

New Zealand's experience of the Great Depression was mild compared to the more developed northern hemisphere. Owing to the lack of complex internal financial markets or institutional overlap, the state was able to move swiftly in devaluing the currency (immediately increasing export incomes) and nationalizing the central bank (easing lending). However, a capital rebalancing meant significant import

restrictions were enacted in the late 1930s. This, and more broadly an agenda of 'insulationism', would become the defining feature of the economy until 1984.

1945 - 1984

Like several other Commonwealth countries, the end of World War II presented an opportunity for New Zealand to claim political independence, completely governing its own foreign affairs while still recognizing the figurative authority of the monarch. In reality, this qualititatively changed little, as the nation continued on the path it began in the mid-1930s with a close reliance on Commonwealth markets. The conception of the relationship between state and society was remarkably bold for the time, resulting in one of the earliest 'welfare states' in the world. The causes of this are surmised by historian and economist Brian Easton:

> "There was no older social structure to fall back upon. New Zealand could not use the parish-based provision of Britain, because it had no suitable parishes, while the commitment to a secular state - a state without an established church - meant that parishes could not be artificially created. Nineteenth century European New Zealand even lacked that fundamental unit of Victorian virtue, the family. Most of the old and indigent at the end of the century had no children or, if they did, their children did not live near them. Thus New Zealand had to create means of community support in a system outside the family or the locality" (1996, p. 1).

Yet there is a difference between the principles that underlay the early New Zealand welfare state and that which we connotate with welfare today. This was one based on full employment, on the notion that the most holistically equitable way to empower a populace is by letting them work for an income. There was no shortage of work, as the frenzy of war had meant much of the necessary recuperation of public works following the Great Depression had been postponed. A 1946 white paper outlined the 'urgent' public demand for housing, energy generating facilities, railway electrification, highways, bridges, and urban engineering, of which the cost to satisfy would be 'heavy' (McKillop, 1946).

Despite this apparent deep demand for labor from the public sector, it would be the activities of the private sector that came to symbolize the New Zealand economy, one frequently denigrated with claims of bloated inefficiency. As a result of strict import restrictions, the onus fell on domestic producers to replicate many consumer goods produced much more efficiently overseas. Without technical expertise or economies of scale due to the small local market, dozens of small manufacturers sprung up, producing

refrigerators, radios, appliances, and so on. In 1963, after a brief relaxation of the import tariffs, 35 independent firms were either manufacturing or assembling radios and televisions at an average of 6000 units each, as opposed to the more normal 100,000 unit run common in Europe. This haphazard method of consumer goods production not only resulted in steep costs both for producers and consumers, but it also led to marked disparities when compared to other developed nations. For example, while almost every New Zealand household owned a radio set (proportionally more than the U.S.A., U.K., Australia, France), only 14% owned a television, whereas in those countries this percentage was closer to 90%. An NZ Institute for Economic Research report concluded a study of domestic manufacturing industries with the following:

> "If the costs of producing radio and television sets in New Zealand are likely to remain 100 per cent above costs of production in large industrial countries (and on the basis of the evidence presented in chapter VI this is a generous assessment of the higher costs of production in New Zealand) then it is a valid question as to whether the capital and labour now engaged in this industry could not be employed elsewhere to the greater national benefit" (Sewell, 1965).

While private sector protectionism allowed for strong employment figures across the country, the state sector was utilized judiciously to effectuate the state's infrastructural needs. Sidney Holland's National Party administration saw an upsurge in public sector economic activity, and, "by 1955, 20,661 temporary and casual staff, many of them forestry and railway workers, supplemented a permanent staff of 32,294. Women constituted almost one third of this core Public Service" ("100 years", 2013, p. 22).

A decade later the number of public service employees rose to almost 70,000, resulting in complaints - generally from Auckland - about the wastefulness of Wellington's political bureaucracy. This was cemented in the 1970s, with revered Prime Minister Norman Kirk's stating that, "the virus of empire building lies dormant in every vein" (NZ Listener, 1975). Such suspicion and resentment toward the Public Service continued into the Muldoon administration, with one MP likening it to a doomed 'sacred cow', while the country's largest newspaper denounced the employees', "superannuation schemes, very cheap housing finance, cut rates on purchases ranging from liquor to cars and ample holiday and sick leave" (NZ Herald, 1976).

New Zealand's delicate entanglement of trade relations and insulated industry soon began disintegrating, first with the induction of Britain into the European Economic Community (an economic precursor to the EU) and then the 1970s economic crisis. To the former point, Britain now had overriding

trade obligations to its European partners, severely limiting their ability to continue acting as the Commonwealth's 'purchaser of last resort'. To the latter, New Zealand not only felt the impact of the OPEC oil crises which harmed its balance of payments, but also the trauma of a global economy rapidly skewing toward a post-industrial service sector. This period caused some dissonance between a national disposition of prosperity and growing evidence of falling living standards. New Zealand's economic growth fell from among the top five in the OECD to 19th by 1980, and, "especially galling was the fall in average real incomes relative to Australia. To add to economic woes, a rare combination of rising unemployment and high inflation, which rocketed to 18% in 1976, baffled economists and policymakers" (Smith, 2005, p. 202).

While initially Prime Minister Rob Muldoon had enjoyed favor as a benevolent dictator (holding both the executive and Minister of Finance, a highly unconventional concentration of power), the simultaneous deterioration of the economy and his mental state quickly eroded goodwill. He held an intrinsic suspicion of the free market, championing the active management of the economy and civil society in such a manner that citizens would see their quality of life rise in concert with economic growth, while 'being protected from its excesses'. The experience of being raised in an all female home without a male 'breadwinner' or social safety net followed him to the Beehive's 9th floor, where he sought to erect bulwarks to inequality. More than ever before or since, New Zealand began resembling a command economy under Muldoon, with his name today most closely associated with the monolithic and maligned 'Think Big' projects, a series of massive infrastructural undertakings intended to remove New Zealand from reliance on the global energy grid.

1984 - 2018

In what is now New Zealand television infamy, on June 14 1984 Prime Minister Muldoon strode out of a Cabinet meeting unmistakably drunk, surprising the nation by calling a 'snap election' for one month hence. A record 93.7% of New Zealanders turned out to vote, ousting Muldoon to herald in the brilliant orator David Lange and his fourth Labour government. However, this was not the Labour party that the working class and Māori had relied on to champion their sectional interests for the past half-century; this was a young, highly educated and radical generation of technocrats who had been waiting eagerly for this moment since the late 1970s. Leading the charge was Minister of Finance Roger Douglas, flanked by MPs Richard Prebble and David Caygill, all determined to implement an agenda of sweeping reform that would come to be known as 'Rogernomics'.

The policy setting came directly from the American freshwater schools, meshing the firm-level theory of Demsetz and Coase with theory on contestability, public choice, monetarism, rational

expectations, transaction costs, and property rights, all of which, "the Treasury economists were anxious to try in practice" (Bollard, 1994, p. 94). This was an unapologetic supply side framework, one that denounced fiscal policy for its distortive effect, pedestalized price stability in order to aid capital accumulation, and put forward the consumer, not the worker, as the paramount economic agent. Almost immediately the currency was floated and devalued by 20%, and financial controls were dissolved, prompting a run on banks and massive capital reallocation. Foreign investment flew in to take advantage of the rising interest rates, appreciating the New Zealand dollar and harming those very producers that the currency devaluation had meant to support. Trade barriers and import licensing were the next to go, while the removal of the Supplementary Minimum Price Scheme (a state subsidized price floor for dozens of agricultural products) combined with interest rate hikes put farmers under intense pressure.

These changes paralleled and eclipsed Thatcherism and Reaganomics, comprising, "one of the most notable episodes of liberalization that history has to offer" (Henderson, 1995). Once changes in the financial and agricultural sectors were underway, Douglas and his team turned their attention to fiscal and monetary policy, as well as reforming the labor market. The civil service faced a massive overhaul, as new Reserve Bank Governor Rodrick Deane removed 90% of the New Zealand Public Service Manual directives put in place over the previous 75 years ("100 Years", 2013). By 1993, core Public Service numbers had been slashed from over 70,000 to 36,300 in a period of seven years (Evening Post, 10 June 1993), demonstrating the focus on private sector provision of services.

Despite being perfectly in line with the government's radical neoliberal agenda, privatization of State Owned Enterprises (SOEs) was publicly denied by central figures such as Prebble, who stated, "No government has the right to sell off State trading enterprises to its cronies" (NZPD, 1986, p. 4731). However, the following year a battery of SOEs were up for grabs. Some members of the prestigious 'Business Roundtable', who emphatically endorsed the government's radicalism on the justification of 'economic common sense', were also CEOs of large private companies - BNZ, Telecom, NZ Rail, Tower Corporation, Fletcher Corporation among others - that went on to stake billions of dollars' of claims in these SOEs. The SOEs that remained in the government's hands were pared down in size, with management being transferred from ministers to 'CEOs' that were charged with turning over a profit at the expense of constituents turned customers. Figure 1.3 illustrates the effectiveness of these practices on the bottom line, a necessary component of which being a reduction in employees (Figure 1.4).

Although both the Treasury and Reserve Bank had been espousing money neutrality since the 1970s, it wasn't until a Reserve Bank Act reformation in 1989 - whereby the promotion of full employment was removed from its mandate - that this was institutionally codified. Unemployment thus became a byproduct of the effects of monetary policy that targeted, "a money supply growth rate based on likely sustainable real economic growth plus the desired inflation rate" (Zanetti, 1984, p. 16); in other

words, monetarism. Rather than acknowledging inflation as an indication of the relationship between income shares, external pressures, productivity, taxes, financing costs and so forth, it was reduced to the most facile of explanations: fluctuations in the money supply, which was something that the Reserve Bank could supposedly fine-tune with impunity.

Pursuant with this was the government's neoclassical conception of the labor market. Zanetti provides a succinct summation:

> "Considerable stress is placed on the role of wages in allocating labour between firms and between occupations; labour market rigidities are stressed as factors preventing a general equilibrium allocation of labour, and unemployment is seen as an adjustment problem arising from wage levels that are too high. Treasury also believes that most unemployment is of short duration and is therefore acceptable, and that the level of unemployment benefit affects the duration of employment" (1984, p. 24).

Therefore, policy focused on forcing down real wages that had been 'inefficiently' inflated due to unionism and insulationism, by removing institutional rigidities - minimum wages, mandatory union registration, licensing - thus incidentally increasing the capital share of profit.

Dwindling political capital prevented Labour from making significant inroads on employment policy. Despite a shock re-election in 1987 - Labour was able to convince its traditional voting base that concessions were coming - by 1990 the party was imploding, with Prime Minister Lange vetoing a Douglas economic package that he thought took the agenda beyond what was 'acceptable and rational'. Looking back on his cabinet's time in power, Lange mused, "We got thrown out of office because we went beyond that which was essential and started to pursue things for their own sake and the sake of ideology. That is an outcome which I regret. I apologize however for nothing of what we did to begin with" ("The Remaking of New Zealand", 1994). Yet the incoming National Party government headed by Jim Bolger made no pretense of slowing down the reform agenda.

Union membership had already fallen from 63% to 54% from 1987 to 1990 due to the Labour Relations Act, but the increase in employee fragility was accelerated with the 1990 Employment Contracts Act, perhaps the most significant piece of labor legislation ever passed in New Zealand. Its central purpose was to facilitate the idealized labor market of atomized employees and employers. Unions lost all special privileges and their tax-exempt status, and as there could now be no stipulation in a contract of joining a union, they were required to compete with each other. Striking was restricted to matters concerning only ongoing negotiations, and

were not permitted to target more than one employer as a 'defendant'. The results of this legislation were swift and stark, as outlined by Pat Walsh:

> "The first six months of operation: a substantial, perhaps irreversible fall in trade union membership and collective bargaining coverage, the continued erosion of employment conditions and employment security, a growing sense of employer strength and militancy, and a more conflictual and antagonistic approach to industrial relations" (1994, p. 59).

Rather than acknowledge that many of the so-called rigidities it sought to destroy were in fact institutional safeguards erected bipartisanly, the National government acted such that workers were the stubborn remaining puzzle piece to achieving allocative efficiency. Figure 1.5 shows the devastating effect of the ECA on union membership, which at 2016 sat at a little over half its 1989 figure despite a rise in absolute labor force numbers.

The flurry of regulatory and legislative reform in the decade following 1984 composed a morose story for New Zealand workers. Marshalled into submission by rising unemployment and the sense of betrayal by their long-standing advocate the Labour Party, the working class appeared fractured and punchdrunk. In a possible show of political gamesmanship, once in opposition Labour released a damning minority report investigating the impact of the ECA, finding, "a pattern of abuse for illegitimate ends which are either without remedy under the Act or which cannot be enforced because of the overloading of the institutions and inspectors" (Labour Party, 1993). The local Council of Trade Unions appealed to the International Labour Organization (ILO) to investigate the ECA, with the ILO penning a working paper that outlined alleged transgressions of the Act and potential remedies. Almost immediately the ILO and CTU faced a backlash from the business community, with comments that ring similar to the types of anti-establishment demagoguery heard today: "the ILO, located in a European timewarp of central planning, overblown state spending and poor productivity, should sweep its own doorstep first. Far too much time is spent in this country kowtowing to foreign 'experts' whose opinions are better ignored" (NBR, 23 Sept. 1994). The irony that the entirety of the deregulatory agenda had been lifted directly from the academic journals of foreign 'experts' passed unnoticed.

Broadly speaking, the 1990s were an economic mixed bag (Figure 1.6). The authorities were certainly pleased with a marked reduction in inflation, as well as fiscal surpluses. A hallmark piece of legislation of the decade was the Ruth Richardson (former Minister of Finance who oversaw 'Ruthanasia' - the slashing of social welfare spending in the early 1990s) sponsored 'Fiscal Responsibility Act'. To Richardson and her cohort, "the build-up of government debt since the early 1980s raised a moral issue in

that the political system was being used to pass a tax burden onto future generations who were underrepresented by today's politi-cians" (Scott, 1995, p. 4). On the back of a strong fiscal surplus at the beginning of the 1990s, the FRA was an attempt to cement these changes to ensure long-term fiscal neutrality.

However, this fiscal stance had unwitting effects on other sectors of the economy. Given that the New Zealand government is the sole source of New Zealand dollars, once the government began recording successive surpluses - that is, destroying more New Zealand dollars through taxation than it was generating through spending - the private sector began looking at other ways to fund expenditures and store capital. This fiscal stance coincided with financial sector deregulation, which, "allowed households to maintain consumption levels by increasing their borrowing in a way that was not previously possible" (Kelsey, 1997, p. 157). This process is shown in Figure 1.7 where household indebtedness as a percentage of income steadily rises some 40% in the 1990s. The new millenium did not abate private borrowing, growing to 160% of income by 2007, slowing only once recession hit. In this respect, New Zealand followed much the same path as the US and European economies, all suffering from an overabundance of - in the terms of Hyman Minsky - speculative and Ponzi positions in financial markets.

Indeed the entire debate in the 1990s and through to 2018 reflected a serious misunderstanding of money within the fiscal and monetary authorities. The central question became 'what to do with the surplus' (as if it were a flow to be captured), with the main suggestions centering around, "using the surplus to repay debt...and to set aside a portion in a fund to meet future NZ Superannuation pressures" (Kirkham & Little, 2002, p. 8). In reality, the New Zealand government could repay any New Zealand dollar denominated liability, including Superannuation, at any point; there is no excess 'stock' of dollars that have been collected from taxation from which to draw. The early 2000s saw mediocre economic growth, with high interest rates maintained as inflation remained stubbornly above 3%. While unemployment did continue to fall from the highs of the early 1990s, it took until the eve of the Great Financial Crisis (GFC) before it moved below 4% for the first time since the early 1980s, and it did not hold long. Citing runaway housing prices, strong consumer spending, and oil price pressure, the Reserve Bank raised the Official Cash Rate to 7%, and soon after expressed surprise that such tight monetary conditions were having little effect on dampening inflation and spending. Budget surpluses continued while the New Zealand dollar rallied to record highs against its U.S. counterpart.

By 2007 the OCR rose above 8%, while almost a dozen finance companies were placed into receivership, with some directors facing criminal charges over fraudulent reporting. Despite, "many key economic indicators such as unemployment projected to keep deteriorating well into 2010" (RBNZ, 2018), the OCR was kept at a modest 3% throughout the period, reflecting inflation anxieties within the Reserve Bank. While the unemployment rate never rose above 7%, its distribution was concentrated in

such a way that its corrosive influence centred on and pervaded select regions and ethnicities, an 'influenza' style phenomenon discussed more in Chapter 3. Moreover, the labor force participation rate fell until 2013, masking the full extent of labor degeneration.

Looking back upon 35 years of neoliberal economics in New Zealand, it is nigh time to ask ourselves how successful this 'experiment' has been. Although the comparison is drastic, one may draw parallels with the Fourth Labour Government and any number of historic revolutions. Introduced in a time of uncertainty by an educated bourgeoisie purporting to radically shake foundations for the betterment of the working class, this was simply a perverse example of the inmates taking control of the asylum. The technocrats had little interest in how the wonderfully neat models and assumptions of economic journals would translate into reality, preferring the comfort of metaphysical abstraction and a heady dose of the savior complex. If not for a goading global cohort of likeminded economists and bureaucrats wielding immense social power, it is likely that Douglas & Co. would have been ousted while their dogmatic machinations were still capable of being easily unwound. As it stands today, New Zealand and the countless other developed nations suffering from a quagmire of insipid growth and persistent unemployment face a long struggle if they are to achieve what seems to have become a flying pig: full employment.

Understanding how the amazing economic changes of the 1980s and 1990s were justified requires an appreciation of the history of economics as an academic subject. While many may assert that it is a natural science like any other, with hidden truths slowly revealed by the passage of time, in truth it has been subjected to gales of subjective whimsy and institutional tyranny, thereby resembling not an assemblage of scientifically proven 'truths' but a corpus of mutually agreed upon assumptions and inferences. It is intended that through an examination of these theories of employment determination, we may come closer to understanding what causes unemployment and subsequently how to combat it.

Chapter 2

Despite its current ubiquity, persistent involuntary unemployment is not an idea as old as economics itself. Early economic theorizers focused on the battle for scarce resources, and how these provisions would be apportioned in light of the rapid technological advancements of the 18th and 19th centuries. Innovation necessitated a change in society's organization and relations, and these thinkers undertook a technocratic endeavor to influence the direction of this shift. How the economic pie would be divided was the source of eminent tension (by class or by output) for classical economists, who largely dismissed the idea that some may fall through the income 'crack' altogether. The current normalization of unemployment should then come as little surprise, despite the unlikelihood of it having any pre-capitalist provenance. Societies of the past utilized every individual available in survival and production, and the idea of an idle hand would have, and should have, made little sense. While modern capitalism has granted those of us in developed countries salvation from the yoke of the first of these pursuits - we have altogether *too much* food - its psychology of the second is such that production begets production. Our insatiable wants demand more and more goods (even if the majority are mere derivatives of the previous year's 'model'), all requiring some amount of labor to produce, and thus we lose any justification for unemployment on the grounds of abundance. This does not even take into account the mass of work generated by capitalism to mend the wounds wrought by its environmental and social carelessness, going unfulfilled in the absence of profit.

Let us also do away with the fantasia that we may adequately address unemployment as a scourge without a coherent understanding of its source and nature. The time for tinkering is over, as for too long we have treated families and communities as dispensable units in economic experiments, trying to ascertain the elasticity of this or that parameter in increasingly disconnected models. Eradicating unemployment requires not only identifying its source, but actually acknowledging that it *is* a problem in itself (oddly contentious), plus the nature of its persistence, cyclicality, and concentration. These features must form the foundations of any successful theory, and only then may we posture solutions. Attempting to propose any fix that does not arise from a platform that admits the full extent of the problem is doomed to fail, and that is what we have seen in the empty efforts of our governments in the previous 30 years.

The following chapter is an attempt to briefly survey the evolution in the understanding and treatment of unemployment throughout economics' brief history. Beginning with the ideas of the classical tradition, I trace these through to their various modern day interpretations of unemployment as either a necessary evil or useful policy tool. Following this, I then move back in time to outline the roots of the

Keynesian 'revolution', which, depending on one's convictions, comprised a 40 year distraction or a fleeting glimpse of the possibilities to be had in rethinking what is commonly accepted as economic truth.

Classical economics

The classical thinkers, often seen as catalyzed by Adam Smith, started their analysis from an implicit Say's Law foundation. Through what John Mill stated was the most certain of economic 'propositions', "The production of commodities creates, and is the one and universal cause which creates a market for the commodities produced" (1808, p. 81). In the creation of a commodity, such value is generated and transmitted to the economy that is exactly sufficient for the purchase of that very commodity. Funds for investment must come from savings (the latter therefore not considered a leakage), a principle which sat alongside Smith's division of labor, the necessity of capital accumulation from Locke, and Ricardo's comparative advantage in trade, as the fundamental tenets of early capitalist economics.

With an understanding of the most basic relation between supply and demand, the classical economists set about to interpret what the introduction of market forces to society would be, depicting a generally optimistic outcome. Smith saw it as the natural state of being for '*homo economicus*', the archetypal Economic Man, whereby a societal predilection for self-interest would aggregate to efficient resource allocation. John Mill painted a quaint future, in which the achievement of sufficient economic wealth could allow society to eschew banal economic matters and turn to the arts and culture. Thomas Malthus and Henry George introduced notions of strain within the system through overpopulation and class respectively, and while Ricardo also recognized competition among classes for shares of income as an issue, he stressed the possibility of involuntary unemployment as a result of technological advancement. From his seminal 'Principles':

> "I am [now] convinced, that the substitution of machinery for human labour, is often very injurious to the interests of the class of labourers…the same cause which may increase the net revenue of the country, may at the same time render the population redundant, and deteriorate the condition of the labourer" (1817, 31.3).

Ricardo asserted that while the use of machinery may see net income increase, it would be disproportionately allocated toward rentiers and capitalists, not workers. Yet Ricardo did not discourage the use of capital, as he foresaw the nation to do so to be undercut by a neighbor who did not hesitate to employ machinery, thus undergoing an even greater reduction in demand for output and employment.

Ricardo utilized wages as an equilibrator between the supply of labor and its demand. Building on Malthus' work on population (Malthus saw unchecked population growth as a poverty entrencher), Ricardo used the concepts of the market wage and the 'natural' (subsistence) wage to conceptualize the embryo of labor market theory. Any deviation of the market wage from the natural wage would have consequences for the supply of labor. If, for example, the market wage fell below the natural wage due to an excess of labor in relation to available capital, "only after their privations have reduced their number, or the demand for labour has increased, the market price of labour will rise to its natural prices, and the labourer will have the moderate comforts which the natural rate of wages will afford" (Ricardo, 2004, p. 94).

A fertile battleground for the Classical economists was the question of value: by what property of a good can we adjuge its 'fair' compensation? On a deeper level, the nature of value touched upon the very fibers of capitalism, on *what* the supposedly self-regulating market regulated itself with. Smith advanced two theories of value, that of use (utility derived from consuming a good) and exchange (what one can demand with a good). Within this model also lies a market price and natural value (much like Ricardo's respective wage levels); the former fluctuating in the short term based on market conditions, the latter – a reflection of input costs and inherent qualities – found in the long run through competitive market forces. Although Smith's exchange value included some consideration of an underlying labor component, it took Ricardo to comprehensively forward a labor theory of value: "the value of a commodity…depends on the relative quantity of labour which is necessary for its production" (1817, 1.1).

To find a barometer of value, the German philosopher Karl Marx looked for a common denominator in all goods, concluding, "all commodities are only definite masses of congealed labour time" (1993, p. 6). His answer to the question of how one aggregates disparate labor productivity was simply to represent skilled labor – for example, a banker or a craftsman – as a multiple of the simple 'abstract' labor unit. He added the concepts of unproductive labor and dead labor, the former as one that doesn't directly contribute to the value adding process (e.g. management), and the latter as value imparted into a good by past production processes. Marx divided the laborer's day into two sections: first, the amount of time needed to produce the value of their (subsistence) wage, and second, the amount of time worked over and above this, considered surplus value and extracted by the capitalists, making up the basis of profits.

Marx posited a more critical judgment of capitalism than his classical predecessors, influenced by the experiences of friend and collaborator Friedrich Engels, who was the son of a textile manufacturer in Manchester and financially supported Marx. Where Ricardo, Smith and others had found in pre-industrial history a predilection for self-serving market imitating behavior trending toward stasis, Marx instead saw a revolutionary dialectic process, one that in 'anti-Hegelian' fashion was catalyzed by material realities.

That he saw capitalism as inherently flawed is little surprise given that to Marx, it had evolved from the same thesis as feudalism rather than a fresh beginning; the 'antithesis' (communism) was still to come, only then a mere 'spectre haunting Europe'. The continuation of property rights that determined power and control in feudal society meant capitalism did not even begin from a level playing field, let alone lead toward one. The concentration of the means of production within the select hands of capitalists, while the working class possessed only their labor, meant that the former could extract value from the latter, while the latter's livelihood was subjected to increasingly complex market forces of which they had no say in controlling.

Rather than a glittering frontage of wealth generated by capitalism, Marx saw society atrophying through the commodification of everyday life. Marx provided a stiff refutation of Say's Law, "Nothing can be more childish than the dogma, that because every sale is a purchase and every purchase a sale, the circulation of commodities necessarily implies an equilibrium of sales and purchases" (1993, p. 127). Marx stated that Say's Law – and thus the classical paradigm – implicitly represented a C-M-C′ process (where C is commodity, M is money, and prime indicates a greater amount), admitting that in this circumstance, where everyone's desired outcome was to turn some medium of exchange back into a commodity, balance *could* emerge. However, he noted that while capitalism incorporated the consuming agent driven by C-M-C′, it was predicated on the capitalist, that agent whose desire was to accumulate money through the process M-C-M′. If this second class does not foresee deriving a profit from the production process, they will not undertake it, causing a downturn and unemployment.

Foreshadowing Keynes by some 75 years, Marx introduced the crucial – yet irrevocably perplexing – element of time into economic analysis, whereby agents could hoard money instead of plowing it back into the monetary production process, generating uncertainty. This, along with firms constantly desiring to increase the ratio of machinery to labor, and the reinvestment of profits propelling a concentration of capital within fewer firms, lay the groundwork for Marx's explanation of unemployment. Using more efficient 'labor-saving' technology, *ceteris paribus,* must reduce the employment of labor until new industries spring to supply employment opportunities. Unable to find an outlet for production as the unemployed lose their buying power, firms contract production, firing workers and swelling the numbers of a:

> "surplus laboring population…a necessary product of wealth on a capitalist basis, [which] becomes the lever of capitalistic accumulation, nay, a condition of existence of the capitalist mode of production. It forms a disposable industrial reserve army, that belongs to capital quite as absolutely as if the latter had bred it at its own cost." (1995, C. 25)

This reserve army, a term co-opted from Engels, represents the swathes of unemployed who are structurally excluded from the workforce. In this paradigm, they play a crucial role in cementing employer power in labor-relations, especially with regard to wages. If employed workers are confronted with the possibility of not working, they may be more behaviorally pliable, and wary to negotiate. This concept of the unemployed as a 'tool' did not die with Marx, and would resurface later.

Marginalism

In the 1870s, Stanley Jevons and Carl Menger independently forwarded the theory of marginalism, which is the derivation of value by observing the effect of a marginal unit of a good or service. Their analysis was generally normative, yet the implications would come to be stated as natural laws, with primitive man seen as 'protobusinessmen', calculating marginal costs and benefits that may only be revealed through the results of their decision. Along with Léon Walras' theory of general equilibrium, economics as the study of a process toward equilibrium was wrested from the classicals, now geared toward finding a 'snapshot' of equilibrium with liberal use of *ceteris paribus*. This methodology was to be extended in a myriad of ways, and with regard to labor, by Arthur Cecil Pigou in his 1933 'Theory of Unemployment', which J.M. Keynes deemed, "the only detailed account of the classical theory of employment which exists" (2013b, p. 7).

On both a micro and macro level, employment was said to be determined by a simple price mechanism. Its proxy, the real wage, equilibrated between suppliers of labor and firms, whereby the respective supply and demand curves rested upon two assertions. Firstly, the demand for labor adhered to the law of the marginal productivity of labor (MPL): firms would hire workers such that the output of an additional worker was equal to or greater than the cost of employing that worker (the real wage). This marginal productivity diminished as employment increased, at least in the short run, a carryover from the classical production function. As more labor was added to fixed capital inputs, the ability of labor to efficiently utilize capital fell, as theoretically 'crowds' of workers huddled around a set number of machines. Moreover, as firms made their way through the pool of available labor, each successive worker employed was de facto less productive than the former, as if firms had a neat schedule of all available workers and their correspondent productivity, which they made their way down throughout the business cycle. The second assertion of the classical labor market was that suppliers of labor did so in light of a dichotomy of labor and leisure. Every hour of work provided an amount of disutility that must be so compensated, otherwise the worker would derive a greater amount of utility from leisure and thus choose not to work. This led to a conflict of incentives in regard to changes in the real wage. Workers may work

more in response to a wage rise as the opportunity cost of leisure grows, or find themselves more contented working a lesser amount that now earns the same amount as before the wage rise.

This model ensures continuous equilibrium. As one piece of the classical 'puzzle' shifts (for instance, a rise in the price level), all other units adjust accordingly, settling at a new point of equilibrium where there is full employment and investment equals savings. There is no endogenous instability; it requires an external 'shock' to disrupt the invisible hand.

In a post-enlightenment society, this understanding of the labor market placed individualism and autonomy as the key determinants of one's lot in life. The classical economists were in this sense ideological disciples of the school of classical liberal philosophers: Locke, Mill, Montesquieu. If an individual was dissatisfied with their level of income, it was on them to increase the marginal productivity of their labor (through upskilling and education) in order to demand – deserve – a higher wage. Workers were also seen to have liberty in choosing their level of employment through the labor-leisure tradeoff, rather than exist perilously at the mercy of complex macroeconomic processes. Vilfredo Pareto asserted that markets served as the primary way to derive and satisfy people's desires - 'voting' with one's dollar through consumption simultaneously illustrates what someone wants and gives it to them - and and therefore any impingement on the market mechanism in the name of equality will reduce efficiency, necessarily making others worse off in the quest to make someone better off. By prescribing the economic objective to be allocative efficiency classical economics was in a sense engaging in a Wittgensteinian language game, where the goal was already given by the way the models were formatted. Economics began chasing its own tail, as academics asserted that the satisfaction of their models (through achieving equilibrium) was indicative of humanity writ large, as opposed to a narrow, static set of qualifying assumptions and simplifications. Consequently, since one could not argue with the existing classical conclusions drawn from those very models (due to their tautological nature, e.g. a rise in the real wage reduces aggregate employment), opposition to economic 'truths' were labelled as heretical cranks or forced to construct an alternate paradigm altogether.

Problematically, there was no mechanism for persistent involuntary unemployment in the classical labor market. While frictional unemployment existed – that short period of time between jobs etc. – the lion's share of those out of work were implicitly ignorant – refusing to accept a wage commensurate with their skill (MPL) – or exercising their liberty in valuing the utility of leisure over the going wage. One explanation posited for mass unemployment, for instance the Great Depression, was a failure in the price mechanism to adequately adjust downward. Somehow, a chunk of workers suddenly found themselves less productive overnight, and since the value of their output fell without a subsequent fall in their wage, they were unable to command work at the real wage that they had been gainfully employed at the day before.

This incoherency could not, and did not, go unnoticed by some in the profession. The end of the 19th century saw veritable fortunes accumulated by tycoons who dominated entire industries, typified by the Vanderbilts and Rockefellers. While textile workers and meatpackers crammed into New York tenements, the owners of the rapidly concentrating capital enjoyed expansive vistas of the Hudson Valley from their villas 90 miles north. Seeking a new method to explain this phenomenon within supposedly efficient capitalism, a young generation of economists put a pointed focus on economic activity as driven by social 'institutions': behaviors, customs, psychologies, pathologies and so forth. The school's most notable adherents - Veblen, Ely, Commons - found limited purchase in academia and fell further in influence following the Keynesian revolution, yet their legacy is still felt today through the strains of economic thought that most closely align with political economy.

Neoclassical economics

In detailing the modern mainstream conception of the labor market, it is best to continue along the path forged by the classicals and marginalists. Although this entails a chronological 'jump' over the immediate post-war period of the 20th century that saw neoclassical theory sidelined in favor of Keynesianism, it allows a more congruent understanding of today's orthodoxy. Some modern neoclassical schools claim Keynesian heritage, insofar as they recognize government stimulus is as a valid counter-cyclical tool, yet their foundations are firmly in the classical tradition, which E. Roy Weintraub characterized by the following microeconomic axioms. First, agents maximize utility in their decision making, thereby being ultimately self-interested, aside from when acting in another's best interest happens to align with one's own. Moreover, the aggregation of mankind working toward billions of individual best interests is the most efficient, fair and 'natural' means of organizing society and economy. The convenient corollary to utility-maximization is that firms maximize profit in their decision-making, hence the incentive to demand employment up to the point where the marginal cost of employment, the real wage, equals the marginal revenue from another worker. Second, agents are rational creatures. This is an extremely contentious idea, and no one explanation could cover the myriad ways in which it is interpreted and applied. However, through this consumers' preferences are generally assumed to be complete, reflexive, transitive, and monotonic. Third are agents' absolute insight and foresight: perfect information. While it may be recognized that humans obviously *do not* possess perfect information, it becomes necessary to model them as such in order to ascribe their potential decisions with probabilities. Without this assumption, it becomes incredibly difficult to create economic models *a priori*.

Although today's orthodox schools have moved on in complexity from the rudimentary classical labor market model, the upward-sloping supply curve intersecting with a demand curve adjudicated by

the real wage still lies at their heart. Indeed, it runs that if the price mechanism is allowed to operate unimpeded by institutional barriers, the labor market would equilibrate at full employment, where everyone who wanted work found it. This was a significant claim from the classical economists, and laid the foundation for general equilibrium theory, a mathematical search for a price vector that 'cleared' all markets simultaneously: total efficiency.

The post-war period saw an influx of formally educated mathematicians and physicists dominate the economics departments of several renowned universities. Economics became another casualty to the era of 'modern mathematics', an analog of self-reflective modern art and architecture that stressed, "abstraction, glorified purity and tried to simplify its results until the roots of each idea were manifest" (Mumford, 1991). The Bourbaki school best exemplified this obscurantism, deliberately scuttling any possibility of interdisciplinary association in their work by using the most rigorous language and form whenever possible. To them, the theoretical innately sat above the applicable, which they deemed 'axiomatic trash'. Gérard Debreu came of age in France under the Bourbaki revolution, becoming immortalized in the economic pantheon alongside Kenneth Arrow with a 1954 proof of general equilibrium. No matter that their model lacked money, a state, or any feature that resembled reality; with this proof, general equilibrium ceased being a thought experiment, evolving into a "self-sufficient formal structure" through which all economic research and analysis subsequently passed (Ingrao & Israel, 1990, p. 286).

At the same time, Milton Friedman rose to prominence championing the primacy of positive economics over normative, and moreover, that the predictive capability of a model or theory supersedes considerations of realism within the assumptions:

> "Viewed as a body of substantive hypotheses, theory is to be judged by its predictive power for the class of phenomena which it is intended to "explain"…The only relevant test of the validity of a hypothesis is comparison of its predictions with experience" (1966, p. 8).

Therefore, if a model cannot be empirically disproven by past events it stands as valid as any other model, regardless of their respective underlying structures. Friedman later admitted that this was his most controversial writing, and justified his lack of participation in the ensuing debate by saying he preferred to 'do' economics, rather than simply talk about it. Critics of this instrumentalist approach point toward the inability to compare models *ex ante* if construction of the model is not taken into account. Simply relying on empirical verification of a model after a shock misses the entire point of economic modelling - to forecast events - drawing to mind Keynes' assertion that, "economists set themselves too

easy, too useless a task, if in tempestuous seasons they can only tell us, that when the storm is long past, the ocean is flat again" (2013a, p. 65), or after an economic crisis that its occurrence was indeed predicted - by the error term. Moreover, it is possible for a model with even ridiculous presuppositions to accurately model reality coincidentally, with Bartley Madden providing the following example:

> "Take the theory that water behaves as if there were a water devil who gets angry at 32 degrees and 212 degrees Fahrenheit and alters the chemical state accordingly to ice or to steam. In a superficial sense, the water-devil theory is successful for the immediate problem at hand. But the molecular insight that water is comprised of two molecules of hydrogen and one molecule of oxygen not only led to predictive success, but also led to better problems" (2006).

After Keynes introduced the idea of studying macroeconomic relations - enabled by the work on national accounts by Clark and Kuznets - economists began creating models that included aggregate variables. New Zealand economist William Phillips empirically derived what came to be known as the Phillips Curve in his 1958 paper, 'The Relation between Unemployment and the Rate of Change of Money Wage Rates in the UK, 1861-1957'. He hypothesized an inverse relation between unemployment and the money wage by appealing to the laws of supply and demand, concluding that, "The statistical evidence…above seems in general to support the hypothesis stated, that the rate of change of money wage rates can be explained by the level of unemployment and the rate of change of unemployment" (Phillips, 1958, p. 299). He stated a belief that were aggregate demand to be kept at a level that ensures wage stability, unemployment could be kept under 2.5%.

Phillip's work was soon co-opted by other economists. First, the parameters of the model were adapted, with Samuelson and Solow widening the scope of the dependent variable from wage inflation to general inflation. There is considerable contention over whether they thought the relationship was stable or liable to shift, yet macroeconomics took seriously their belief that the tradeoff between unemployment and inflation could be exploited by governments through demand injection so as to deliberately and permanently lower unemployment. Their, and their adherents', claim to being in the Keynesian tradition would prove fatal for the latter's hope at revolutionizing the subject. While nowhere in his work did Keynes support or even posit such a relation, his name was quickly attached to a mechanistic theory of tax-and-spend levers. This perversion culminated in the New Keynesian school, who attempted to jury-rig 'The General Theory' with neoclassical 'microfoundations' that had sufficient mathematical clout to withstand the scrutiny of their Bourbaki influenced colleagues.

Friedman then asserted that, "while there is always a temporary trade-off between inflation and unemployment; there is no permanent trade-off" (Blanchard, 2002, p. 170), and consequently put paid to the idea that governments could use the Phillips Curve as a 'menu', choosing between different combinations of wages and unemployment. He did this by introducing adaptive expectations. In the short-run (two to five years according to Friedman), governments could reduce unemployment by injecting demand into the economy through fiscal spending. The growth in money supply would push the price level up, eroding real wages and incentivizing firms to hire more workers (again, up until the real wage equaled the MPL). However, workers could not yet perceive this inflation, and thus that they were now working for a lower real wage: "Indeed, the simultaneous fall *ex post* in real wages to employers and rise *ex ante* in real wages to employees is what enabled employment to increase" (Friedman, 1968, p. 10). Once they could, they would reduce their demand for employment such that the real wage once again just matched the opportunity cost of leisure. The economy would shift back to the original rate of unemployment, yet now at a higher stable price level. This mechanism is detailed in Figure 2.1 by tracing points A to E, with each successive short run Phillips Curve an attempt by the state to push unemployment below its long run rate, U_N. Friedman's conclusion from this was that fiscal spending as a means to reduce unemployment was futile, even destructive, as the economy now had to readjust to a new price level. Friedman and the monetarists of the time grasped the stagflation of the 1970s as a repudiation of governments' Keynes-inspired policies, and empirical proof of the adaptive expectations model that had simply been theory to that point.

This approach found purchase in developed economies, with U.K. Prime Minister James Callaghan stating,

> "We used to think that you could just spend your way out of a recession and increase employment by cutting taxes and boosting Government spending. I tell you, in all candour, that that option no longer exists, and that insofar as it ever did exist, it only worked by injecting bigger does of inflation into the economy followed by higher levels of unemployment as the next step. That is the history of the past 20 years" (speech to Labour Party Conference, September 28, 1976).

The crucial feature of Friedman's curve was asserting a seemingly long-run stable level of unemployment, what has since been termed the non-accelerating inflation rate of unemployment (NAIRU), or simply the natural rate. NAIRU was not an invention of Friedman's, but rather a new framing on a concept that Keynes' chief interpreter, Russian economist Abba Lerner, had termed 'low full-employment'. Friedman asserted that the natural rate was 'man-made and policy-made', pointing

toward minimum wage legislation and labor movements as factors. It is, by definition, the point at which expected inflation is equal to actual inflation, modelled commonly:

$$\square_{\square} = \frac{\square + \square}{\square}$$

where μ is the markup set by firms, *a* a parameter representing the effect of unemployment on inflation, and *z* a 'catchall' parameter for all other factors affecting wage-setting. At every point where the current unemployment rate is greater than NAIRU, there is downward pressure on the inflation rate, and inversely, the rate of inflation rises when the current unemployment rate is temporarily below NAIRU.

The acceptance of this relationship within the dominant economic paradigm had an exceptional impact on labor and society in the late 20th century. Instead of attempting to manipulate a relation between the price level and unemployment - itself a practice that imperils those at the bottom of the labor market - Friedman advocated focusing on the deviation of the unemployment rate from its natural rate, with particular attention on monetary policy as the proper tool. As price stability surpassed full employment as a policy goal for developed economies following the stagflation of the 1970s, governments and economists sought to pin down the parameters that would allow them to fine-tune policy in accordance with NAIRU.

Monetary neutrality formed the basis for monetarism, a modern interpretation of an age-old study into the relation of money and prices. Utilizing a version of the Fisher equation of exchange MV = PQ where M is money supply, V is velocity (fixed), P is price level, and Q is output (fixed), monetarists held that while in the short run fluctuations in the money supply could affect real variables, in the long run money was simply a medium of exchange like all others, and thus could only affect prices. Wary of the perceived propensity of governments to fool voters into thinking a growth in the money supply was economic growth, monetarists sought to create rules, as opposed to discretionary, based policy. Friedman's 'k-percent rule', predicated on a belief that the central bank could exogenously finesse the money supply, sought to mandate a constant money supply growth that facilitated growth and maintained price stability. Although the exogeneity of money would soon be refuted, unemployment continued to be seen as an 'anchor' that held prices in place, a modern retooling of Marx's 'reserve army'.

New Classical and New Keynesian economics

An even more radically free market oriented group of economists rejected Friedman's model of adaptive expectations, leaning on Lucas' 'critique'. If workers are rational agents, Lucas stated that they could not be fooled even in the short-run by a rising money supply. He therefore removed the possibility of workers' inflation expectations differing from actual inflation, instead adding a stochastic error term to

represent random shocks that averaged out: a stationary random walk. This was the death knell for 'textbook' Keynesianism in macroeconomics and politics. State efforts to meddle in the economy were again seen to do more harm than good, a sentiment voters confirmed in the 1980s with the appointment of free-market proponents not only in New Zealand, but also the U.S. and U.K. This carried over to sentiment on labor organization. Unions were seen as impediments to the price mechanism, while protection measures such as wage indexation were seen as increasing the parameter *a* in the equation above, raising NAIRU.

The focus on explaining unemployment moved toward microeconomic components. Nobel Laureate Gary Becker proposed viewing education not as a luxury good but as an investment, introducing human capital theory (HCT). This entails the individual being as a conglomerate of their education, training, and health, as, "people cannot be separated from [these] in the way they can be separated from their financial and physical assets" (Becker). While human capital theory holds more nuance than the classical idea of equating an individual with a single number – their marginal productivity – it builds upon the idea that labor markets are made up of agents with a quantifiable (and perhaps even determinable) value to firms; each uniquely endowed and trained, and each able to command a job of a particular status and wage. A point of rebuttal against HCT is the common observation that workers of seemingly identical skill (by any observable metric) receive widely different wages, which in the neoclassical paradigm is irrational behavior by the firm. HCT posits several explanations for this phenomenon: compensating differentials ('harder' jobs provide greater compensation), hedonic wages (some workers prefer qualities of a job such that they accept lower compensation), and unobservable differences (firms are able to sense the presence of unobservable skills in workers that economists cannot).

Many microeconomic based theories of unemployment have included the notion of 'sticky' wages and prices. New Keynesians posit that nominal wage rigidity, particularly downward, prevents the labor market equilibrating following an exogenous shock, resulting in cyclical unemployment. Efforts to explain reasons for stickiness range from 'menu costs' – costs incurred in the literal changing of prices – to union activity and minimum wage legislation.

Yellen (1984) provided several models based on the concept of 'efficiency wages' that resulted in involuntary unemployment. Firms may hire not based on the marginal productivity of labor of employees, but to that point where, "the elasticity of effort with respect to the wage is unity…this wage choice minimizes labor cost per efficiency unit" (Yellen, 1984, p. 200). Firms *could* pay a lower wage and remain afloat, yet the reduction in productivity of current workers due to receiving a lower wage would reduce profits. Possible causation for this phenomenon may be higher wages causing a reduction in employees shirking and labor turnover, attracting more able candidates, or Akerlofian (1982) 'gift-exchange', where firms provide financial gifts in exchange for the gift of employees' exertions. Yellen

also suggests that the efficiency wage may allow an employer to, "indulge his taste for discrimination at zero cost," (1984, p. 202), while Borjas posits it may be a means to deliberately create unemployment as a, "stick that keeps the lucky workers who have highly paid jobs in line…[whereas] full employment encourages workers to shirk" (Borjas, 2012, p. 529).

An oft-cited example of this practice is Ford Motor Company's decision to raise wages from the accepted $2-$3 per day to $5 in 1913. Described by the company as 'profit sharing and efficiency engineering', it resulted in a workforce that was, "absolutely docile, and it is safe to say that since the last day of 1913, every single day has seen major reductions in Ford shops' labor costs" (Arnold & Faurote, 1915, p. 331). Later studies surmised that this wage rise above the 'market clearing' level resulted in considerable goodwill and output for the firm, to the tune of a 51% increase in productivity and a slashing of shirking, leaving a lasting legacy for managers and textbook writers alike to pine over.

Recently, the concept of a skills mismatch between labor supply and demand has received widespread attention, especially in the wake of the Global Financial Crisis and decades of rapid technological advancement. David Lilien began in the 1980s by linking shifts in industry performance and employment demand, hypothesizing that a "significant fraction of cyclical unemployment over the postwar era can be explained by the slow adjustment of labor to exogenous shifts of sectoral employment demand" (1982, p. 780). In step with the contemporary microeconomic focused orthodoxy, he asserted that the high unemployment seen in the U.S. in the 1970s could not have been alleviated by fiscal or monetary intervention, as the culprit did not lie in inadequate demand.

Crudely, much 20th century work consisted of skills that had been relatively static for a long time – manufacturing – or widening applications of existing managerial and intellectual skills. Purveyors of the sectoral shift theory maintain that the sharp rise in unemployment throughout most developed economies observed in the latter quarter of the 20th century came about not coincidentally as information technology and computing changed both the consumer and industrial landscape. Existing industries quickly adopted these new technologies, and with them came radically new workflows that employees were forced to adapt to. The positive feedback loop of technology – its increasing use and demand leading to further and faster advancements – meant a large contingent of workers found themselves with a relatively archaic skillset. To followers of an HCT led theory, the failure of this cohort to adequately train themselves in new technology meant they became unemployable in middle and higher-wage jobs. Additionally, the parallel effects of globalization led to an erosion of previously well compensated low-skilled jobs in developed countries, as firms were incentivized by customers to chase low costs in a race to the bottom.

As the rate of long-term unemployed has risen post-GFC, economists increasingly point toward this hypothesis. Put succinctly, the sectoral shifts hypothesis, "suggests that there will be a pool of workers who are unemployed for long spells because of a structural imbalance between the skills of

unemployed workers and the skills that employers are looking for" (Borjas, 2012, p. 526). This is often an empirically defended hypothesis, using business surveys that claim a difficulty in filling skilled positions, and the close proximity of the unemployment rate to NAIRU. Reasons forwarded for a skills gap usually consist of the following: automation destroying currently in-demand jobs, technology changing the nature of existing jobs, students graduating with too few applicable 'skills', younger generations lacking necessary professional soft skills. This is not a new theory, having provenance in President Johnson's National Commission on Technology, Automation and Economic Progress in the early 1960s, followed by the intermittent worry that too few university students are indulging in the humanities rather than STEM. Deloitte's 2012 survey 'Boiling Point? The Skills Gap in U.S. Manufacturing' reported that 45% of firms suffered a 'serious shortage' in skilled production workers. Furthermore, over half of firms stated that the most serious skill deficiency was 'inadequate problem-solving', leading to Deloitte stating, "while the national curriculum may be discretely addressing certain skills, there continues to be a lack of broader problem-solving skills" (2012, p. 8).

Almost all proposed solutions given by sectoral shift proponents target the individual worker or firm. In the HCT tradition, workers should be re-trained and upskilled, while firms must strengthen recruitment and consider their geographical location as an impediment to sourcing the right workers. This apology for the status quo has pervaded New Zealand politics for some time, and I explore its validity in Chapter 3.

There is also the notion that while economies may not necessarily experience an explicit skills gap, it is possible for the process that links worker and firm – matching efficiency – to break down. This builds upon the Beveridge Curve (Figure 2.2), a convex-downward relation between job vacancies and unemployment that implies as unemployment decreases, job vacancies will increase as firms struggle to find affordable labor in a tight labor market.

If, as has been seen post-GFC in many developed countries, this relation disintegrates (both vacancies and unemployment remain high), some believe that connecting this glut of unemployed workers with open positions will alleviate supposed tightness in the labor market. Barnichon and Figura (2011) hypothesize that a fall in matching efficiency increased the U.S. unemployment rate by 1.5% following the GFC, while Craigie, Gillmore and Groshenny (2012) modelled a similar phenomenon in New Zealand, citing "the Canterbury earthquakes…[and] the net outflow from New Zealand of prime age workers over the past couple of years, even as demand for skilled labour has been increasing" (p. 9), as possible causes.

Labor market segmentation

Beginning in the 1920s, extensive literature has emerged on the 'Labor Market Segmentation' (LMS) hypothesis. In this theory of employment determination, instead of the classical single labor market, relations between firms and workers can best be modelled by two or more simultaneous equations. While there are innumerable grounds for segmentation – geography, income, race – the majority of studies have focused on a dual labor market model. This model dichotomizes two labor sectors: primary and secondary. The former is generally described by high wages, positive working conditions, strong labor relations, and a long career time-horizon. These jobs have a predictable career path, and a ladder of promotion. The secondary market provides lower wages, and a more precarious employment position that results in a high turnover (Doeringer & Piore, 1970). Demand for primary sector jobs exceeds their supply, while generally, most workers can secure employment in the secondary market owing to its low skill threshold. This situation results in 'queuing', whereby potentially qualified applicants for primary sector jobs may refuse to enter the secondary market and thus remain unemployed. It is also possible to incorporate discrimination into the model, whereby access to the primary market is further hindered by factors chosen by employers.

LMS begins from the facts that labor markets do not clear, and that wages significantly differ across industry and occupation in a manner unexplainable by the classical model or HCT. Thus, LMS expounds that there must be some non-pecuniary rationale behind hiring. In this sense, it moves away from the HCT fixation on the individual toward one on employers and their rationale. This focus on the demand side of employment bridges some gap between macroeconomic Keynesian theory and the intractable classical micro focus. LMS proponents state that, "in recent years, segmentation theory has been a very progressive research program. In contrast, HCT has required frequent modification to account for the empirical regularities generated by the labor market segmentation research program" (Dickens & Lang, 1992, p. 6). From a Kuhnian paradigm shift perspective, enough anomalies have arisen within the orthodox models to warrant discussion of alternatives.

Dual labor market theory builds upon Robert Averitt's 'dual economy', a concept introduced in the 1960s that modelled developed industry largely consisting of two types of firm: core and periphery. Averitt, and later researchers, juxtaposed these in much the same way LMS theorists would come to do with primary and secondary labor markets, with core firms possessing some monopoly power, investing more in their workforce, sustaining higher rates of profit, and paying higher wages. Therefore, core firms generally offer primary employment, and periphery firms secondary employment. Once an employee gains access to the primary sector, they are now part of an 'internal labor market'. This market, often existing within individual firms, is, "shielded from the direct influences of competitive forces in the

external labor market…[and] the remainder of the jobs within the internal market are filled by the promotion or transfer of workers who have already gained entry to it" (Doeringer and Piore, 1971, p. 3). Some have termed such a system as 'industrial feudalism', 'labor market balkanization', and the fusion of 'property rights' into the labor market (Ross, 1958). In the primary sector, firms are willing to invest in the skills of their employees to raise productivity, thereby providing some security to the worker due to the employer having 'skin in the game'.

Several New Keynesian economists of the late 20th century worked to reconcile evidence of a dual labor market with HCT by constructing models that justify some profit maximizing firms (presumably in the more profitable core sector) paying a wage differential, with Janet Yellen's aforementioned models receiving wide support. If a firm's production function is modelled:

$$Q=f(e,w,N)$$

where e is the workers' efforts, w the real wage, and N the number employed, firms will offer a wage w^*, at the point where "elasticity of effort with respect to wage is unity" (Yellen, 1984, p. 200). Firms will then hire up until MPL = w^*, where w^* is necessarily above the reservation wage. This results in a portion of unemployed workers between w and w^* that would otherwise be employed if the market 'cleared'. However, to the firm, reducing the real wage to w would reduce productivity (perhaps by reducing effort), and thus overall increase labor costs. Belying the level of penetration LMS theory had into mainstream Keynesian thought in the latter 20th century, Yellen conceded that:

> "the wage-productivity nexus is important in some sectors of the economy, but not in others. For the primary sector, where the efficiency wage hypothesis is relevant, we find job rationing and voluntary payment by firms of wages in excess of market clearing; in the secondary sector, where wage-productivity relationship is weak, we should observe fully neoclassical behavior. The market for secondary-sector jobs clears, and anyone can obtain a job in this sector, albeit at lower pay. The existence of the secondary sector does not, however, eliminate involuntary unemployment, because the wage differential between primary and secondary sector jobs will induce unemployment among job seekers who choose to wait for primary-sector job openings" (1984, p. 201).

Evidence for LMS in New Zealand received some attention in the mid 1990s, but then fell from provenance as labor market conditions improved in the 2000s. Brian Easton related the passing of the Employment Contracts Act in 1991 (discussed in Chapter 1) to the entrenchment of a labor market duality in New Zealand, as a falling real wage for marginal workers, plus a deterioration of working conditions

and security due to a diminution of the state protected industrial relations process, exacerbated the divide between those who had good jobs and those who didn't.

Robert Bowie (1982) found 'circumstantial evidence' for a secondary labor market in NZ, stating that it was disproportionately populated with women and ethnic minorities, a common thread throughout most empirical LMS work. Sociologist Susan Shipley utilized sample data from Palmerston North to reach similar conclusions to Bowie, although her work largely focused on the prevalence of women in part time work, which, although being symptomatic of the canonical secondary market, is not a necessary condition. Smith & Templeton (1990) used longitudinal income tax profiles to paint an unencouraging picture for New Zealand workers, with significant churn among the bottom quintiles and almost no mobility at the top ('fall out' rates from the top brackets were estimated at around 3% per year).

Explainable by an efficiency wage model or not, LMS obviously contains troubling ramifications for society if true. Research has shown that in the U.S., "Consistent with the dual market typology, those who lived in cities, were married and were white were more likely to be found in the primary sector" (Dickens & Lang, 1992, p. 40). This in itself is no refutation of HCT; it may be postured that white, socially stable urbanites are more economically productive than rural unattached minorities. Yet, marginally justified or not, if hiring decisions reflect ingrained biases, it should be no surprise to see certain demographics persistently represented in unemployment and welfare statistics as we find in Chapter 3. While the two are not mutually exclusive, finding an explanation is but one concern, finding a solution is eminently more pressing.

J.M. Keynes

The central opposition to the neoclassical theory of the labor market as an explanation for employment determination consists broadly of the schools which consider themselves extensions of John Maynard Keynes' general theory as laid out in his 1936 'General Theory of Employment, Interest and Money' (herein 'The General Theory'). While many groups of economists have used the moniker 'Keynesian' at one point or another to describe the foundations of their models, it is worthy to individually measure the extent to which these models actually adhere to Keynes' basic principles, and which ones simply mix and match features of Keynes and neoclassical economics in a manner that does both schools little justice.

Even the task of classifying subsequent schools as paradigmatically Keynesian is difficult, as his texts themselves are labelled as difficult to interpret and disconnected from the precedent academic literature. Regardless of one's opinion of the validity of 'The General Theory' however, it is impossible to

interpret economics in the 20th century without an understanding of the 1936 book and its theoretical edifice. Beginning with a deconstruction and refutation of the classical model - primarily its conception of the labor market from which all else fell into place - Keynes immediately posited his own model of the factors determining aggregate economic activity, delving into their specific determinants and nuances. In doing so, and not unlike the work of Karl Marx some 70 years prior, Keynes also underlined some of capitalism's inherent dynamics that, if left unchecked, would foment inequality and instability. In departure from Marx, however, Keynes maintained the belief that capitalism could be saved, and that with the right guidance, the abundance of its productive power may eventually justify its alienating means.

As mentioned previously, Keynes comprehensively constructed the classical paradigm early in 'The General Theory'. It was one implicitly built from the individual agent up; output in the economy was a function of the number of employed and a fixed capital stock, of which the former was derived from the intersection of labor demand and labor supply. From there it was trivial to locate an equilibrium real interest rate at the intersection of investment and savings, in the so called market for 'loanable funds'. The market for labour and the production function determined the level of output in the economy, while the balance between consumption and investment (dictated by the loanable funds market) regulated the distribution of the given output. This model ensures continuous equilibrium. As one piece of the 'puzzle' shifts (for instance, a rise in the price level), all other units adjust accordingly, settling at a new point of equilibrium where there is full employment and investment equals savings. Where this model has been extended recently, such as in the New Classical tradition, disequilibrium is generally seen as resulting from a distortion in the price mechanism, or a misallocation of resources due to imperfect information. Most importantly there exists no endogenous instability; it requires an external 'shock' to disrupt the invisible hand.

Within Chapter Two of 'The General Theory' Keynes lays out the two postulates of the classical labor market – demand contingent on the relationship between the MPL and real wage, supply contingent on a labor-leisure tradeoff – accepting the first. Following the marginalist tradition, Keynes states, "With a given organization, equipment and technique, real wages…and employment are uniquely correlated so that, in general, an increase in employment can only occur to the accompaniment of a decline in the rate of real wages" (2017b, p. 17). This, Keynes said, was 'indefeasible'.

His first main contention with the classical model lay in the relation between real wages – the determinant of labor demand in the classical labor market – and nominal wages. The classicals had relied on this relation to ensure equilibrium, and proposed wage cuts as the solution to unemployment (thereby allowing firms to hire 'less productive' workers as valued by their MPL). Keynes maintained that a cut in nominal wages did not necessarily result in a consequent reduction of real wages, nor was it even possible to enact an aggregate reduction in real wages. While the classical model implied that a reduction in

money wages would increase profitability for the individual firm, allowing it to hire more workers, this overlooked the consequences of an *overall* reduction in nominal wages. In that case, prices and incomes must fall too, negating the fall in nominal wages and failing to increase employment in aggregate. Keynes even questioned the link between labor supply and the real wage. While workers may reduce their labor if money wages were cut, they may continue working without interruption if real wages were cut *by a rise in the price level*. Simply put, workers are entirely focused on their nominal wage, perhaps as a relative status symbol within firm and industry, and are in a sense unaware of the real wage or the composition of it.

Keynes uses the Great Depression as an example of the incoherency in the classical model. The tacit explanation in the model is that real wages suddenly came out of kilter with the productivity of labor. Workers were suddenly failing to produce an amount that compensated for the cost of their employment, and consequently could not demand employment. Alternatively, workers were taking advantage of the lowered opportunity cost of leisure, and vacationing. Friedman posited a similar explanation, stating that a contracting money supply had driven up real wages, and once nominal wages were cut, workers incorrectly perceived their real wage dropping and withdrew employment.

This refutation of the second postulate brings the classical house of cards tumbling down. However, if employment was not determined in a static labor market, where must we look? Chapter 3 is Keynes' answer to this question, and where he begins to construct his alternative model. It begins with a value judgment: if economics in a capitalist context is ultimately interested in explaining how our economies provide equitable incomes for its human population, why would we measure our economic activity in arbitrary currency units of output which we must eventually translate to how many people are employed? Keynes attempts to skip this confounding intermediary step by placing the number of employed as the dependent variable in his model. The independent variable is outlined in the following: "entrepreneurs will endeavour to fix the amount of employment at the level which they expect to maximize the excess of proceeds over the factor costs" (Keynes, 2013b, p. 24). While this concept is similar to standard microeconomic profit maximization, the shift from marginal revenue to expected proceeds introduces a host of auxiliary factors. The use of expected proceeds came from Keynes' fundamental belief that expectations dominate any monetary economy, due to the nature of time and the unique principles of money. Whereas the classicals saw currency as mostly a means of exchange and replaceable by any commodity that society denoted, to Keynes it was the crucial de-coupler of demand and supply, the object that destroyed the possibility of Say's Law. While supply may create its own demand in a simple barter and exchange economy, money creates the possibility for, "time [to] elapse between the incurring of costs by the producer and the purchase of the output by the consumer" (Keynes, 2013b, p. 46). This introduces fundamental uncertainty into the economy, the necessity for firms to

'guess' future conditions, and thus the possibility of under or overproduction in various industries. Within this decision-making period the firm must hire workers and purchase inputs, having only an informed expectation on whether consumers will purchase all or none of the output. Actual sales never directly determine employment, only insofar as they shift expectations, from which employment is actually determined.

The model of 'effective demand' (Figure 2.3) uses familiar terminology: the aggregate supply curve (Z) consists of the supply price of employing N workers, while the aggregate demand curve (D) represents the proceeds expected from employing N workers. The difference between the two curves constitutes expected profit, and at every level where D exceeds Z firms are incentivized to hire more workers, up until the point where they are equalized and expected profit is maximized. Each curve is a function solely of N. In reality, just as in the orthodox aggregate demand model, the economy is always at the point where D equals Z (the point of effective demand). However, the crucial difference for Keynes lay in the fact that there was no inherent mechanism whereby this point of effective demand would result in full employment. For the classicals, the labor market equilibrated at full employment, whereas Keynes' equilibrium represented stasis, not optimality. Keynes' point of full employment could only be found empirically, by reaching a point where any increase in aggregate demand results only in prices rising, and not N.

An important facet of Keynes' theory lay in the fact that as aggregate income increases, consumption increases by only a proportion of that income, as some is necessarily saved. The proportion that is consumed was called the marginal propensity to consume (MPC), and at any level less than 1 (i.e. every dollar of income completely spent on purchasing output – the classical assumption), there must be an excess of output over consumption that would incentivize firms to reduce output, and thus hiring. Were this process allowed to continue unimpeded, a downward cycle would result, further reducing incomes and thus the community's ability to buy output.

Gaining a more precise picture of this requires breaking down the aggregate demand curve into its two components: D_1 and D_2. The former directly represents the amount of income spent on consumption: the propensity to consume. Therefore, it oscillates with income, although at some point below, depending on the MPC. The gap between Z and D_1, D_2, is the level of investment in output necessary to 'soak up' the excess of output over consumption. Following intuitively, Keynes theorized that investment depends on the interest rate and the marginal efficiency of capital (and by accounting identity always equaling savings), in contrast to the classical position of savings and investment only equilibrating when the price mechanism (the interest rate) 'clears' the money market. The ultimate issue thus arose for Keynes: "except on the special assumptions of the classical theory according to which there is some force in operation which, when employment increases, always causes D2 to increase sufficiently

to fill the widening gap between Z and D_1 – the economic system may find itself in stable equilibrium with N at a level below full employment" (2013b, p. 30). Instead of the real wage determining the amount of employment in the economy, to Keynes it only determined the *maximum* amount (at which MPL equaled the real wage), whereas the actual volume of employment depended on Z, the MPC, and investment. Given D_1, the composition of D_2 is the main determinant of aggregate demand, and by extension, employment.

As noted earlier with regard to the Arrow-Debreu proof, and more generally models of Walrasian equilibrium, neoclassical economics regards the financial sector and money as mere window dressing to the nuts and bolts of the real economy. However Keynes, taking the historically accurate view that 'money matters' as a signifier of debt and power relations, realized that the notion of time (introduced through money) divorced from the capitalist the ability to derive the outcome of investment decisions immediately, and thus those decisions must be founded on mere expectations, of which there was no probabilistic basis for calculation. That is not to say that society is founded on, "waves of irrational psychology. On the contrary, the state of long-term expectations is often steady, and even when it is not, the other factors exert their compensating effects" (Keynes, 2013b, p. 162). The variable nature of expectations, however, introduces some aspect of uncertainty into the economy, and, when married to the peculiar nature of state-controlled money, results in an economy prone to recession and unemployment.

Moreover, Keynes asserted that not only was the level of investment a crucial issue in the functioning of the economy, but that it is equally important to note *where* investment is going. Rather than the classical case of savings smoothly channeling into investment in exact real terms, Keynes noted the wide range of investment vehicles open to firms and households: some employment generating, some not. The notion of liquidity preference and the allure of easy capital gains on the stock market shortened the entire economy's time horizon, with huge capital decisions being made not on the prospect of prospective yields but rather predictions of group psychology, resembling a funhouse of mirrors. This resulted in Keynes analogizing investment as a casino, lamenting the deterioration in prudent capital development that resulted. Thus Keynes' model is termed an 'investment theory of the business cycle'; changes in investment, which are volatile and unpredictable, affect firms' expected proceeds, their hiring decisions, and output. To Keynes, this was the 'essence' of 'The General Theory'.

Keynes' work poses several interesting residua. First, employment may not necessarily be inversely related with the real wage. If the first postulate is relaxed, a minimum wage, instead of presenting a market failure that causes unemployment due to employers refusing to hire workers whose MPL is less than the real wage, may in fact catalyze further employment. This is because the increased incomes of workers shift both the D and Z curves, both of which are functions of employment, with firms incentivized to produce more.

Post-Keynes

Following its release, economists raced to pacify the radical aspects of 'The General Theory' and harmonize it with neoclassical thought; the race was won by Sir John Hicks in his 1937 'Mr. Keynes and the Classics'. Hicks reduced Keynes' model to two equations: a goods market (denoted IS for investment-savings) and a money market (LM for liquidity preference-money supply). It was through this rubric that Keynesianism became synonymous with 'pump-priming'. To much of the postwar Keynesian crowd, countercyclical government spending was the logical response to falling levels of demand. Yet some - generally denoted as post-Keynesian - economists came to view pump-priming to be an obtuse, imprecise tool. While blanket government spending on military, infrastructure, transfer payments and subsidies may go some way in bridging the demand gap, to Hyman Minsky, "this policy strategy leads to chronic inflation and periodic investment booms that culminate in financial crises and serious instability" (2008, p. 308). Thus rose a need to develop policy that pushed the economy toward full employment without engendering an unstable environment of euphoria and hysteria. While Keynes put forward an investment theory of the business cycle, Minsky dug even deeper, creating a 'financial instability hypothesis' that was a fully fleshed out financial theory of investment. He incorporated Keynes' theory of unemployment and writings on the importance of money and investment into a technically meticulous description of how financial markets and industry really work, rather than waving them away as is the norm in the neoclassical tradition. We are thus left with an empirically and theoretically sound hypothesis of cyclical instability that exacts bigger and bigger tolls on the wellbeing of marginalized communities each time around. This will be further discussed in Chapter 3.

Rather than comprising a neat body of empirically proven observations and agreed-upon simplifications, the story of economics is one of fracture. Caught between a desire to forecast with scientific precision and the incalculable nature of social complexities, the majority of economists have plainly dismissed the latter, choosing instead to play games of elaborate mathematics in the pages of the scientific journal. While this is all well and good for their own careers - the academic's paycheck does not necessarily depend on usefulness or substance - it has been at the selfish cost of making real inroads on the economic issues of our time: inequality and instability. The outcome of this can be seen on the streets and in the newspapers of all whose governments have subscribed to the austere neoliberal agenda endorsed by neoclassical economics: climbing homelessness, persistent unemployment, falling infrastructure.

Chapter 3

New Zealand by the numbers

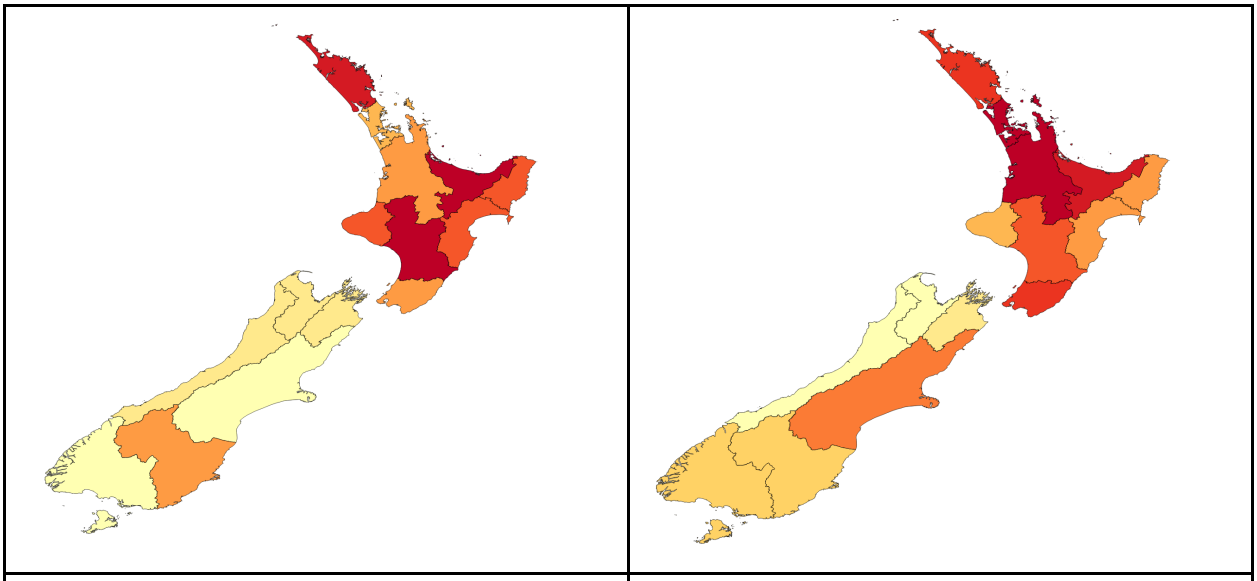
Having furnished a broad understanding of the history of New Zealand's political economy, and then the various theories of employment determination, now comes an empirical assessment of the New Zealand labor environment and a subsequent policy recommendation. Sources of data on New Zealand are both global and local, with the former (OECD, World Bank etc.) somewhat more apt for international comparison, and the latter more frequent and categorically extensive. Statistics New Zealand (SNZ), the Crown institution for the collection and publication of data since 1956, conducts the quinquennial Census and a number of more frequent surveys, of which the quarterly Household Labour Force Survey (HLFS) is most useful for our needs. This, much like its namesake in the US, provides a range of labor market data: labor force, employment, underemployment and so forth, each broken into ethnicity, sex, and region.

At the time of writing, the most recent HLFS is June 2018, summarized in Table 3.1. These figures cap off a five year segment of broadly improving labor metrics, with many in the media claiming conditions are 'tight' and nearing 'full employment' ("Unemployment", 2018; Webb-Liddall, 2018). This period must be understood relative to conditions in 2012: due to an anemic macroeconomic recovery following the Global Financial Crisis, and the devastating 2011 Christchurch earthquakes that disrupted business in the country's second largest city, unemployment peaked in 2012 as business confidence troughed. Figure 3.1 shows the trend in the unemployment and employment rates since 2012, illustrating improvement in both. In absolute terms, 400,000 more individuals are now employed in New Zealand than in September 2012. Labor force participation has also been cause for celebration, recently piercing 70% to join the top OECD performers (Figure 3.2). This has buttressed steady GDP growth of between 2% and 4%, and rising household consumption. This performance has led overseas analysts to paint New Zealand as an economic and social role model ("Transparency", 2017; World Bank, 2018).

Unfortunately, aggregate measures brush over the far ends of the bell curve, an inevitability given that much of economics is to make generalizations from limited data. Unemployment is not a generalized phenomenon; it directly affects only a relatively small cohort of the population, and furthermore, disproportionately within that cohort. Figure 3.3 illustrates the ethnic distribution of unemployment in New Zealand. It is immediately clear that incidence is concentrated within particular ethnicities, a global commonality that has provoked an extensive literature on labor market discrimination. In this case, Māori and Pasifika suffered the brunt of layoffs in the 2012 downturn, while European levels remained robust.

Figure 3.4 illustrates labor force participation by ethnicity for the same period, and again we observe a similar pattern.

Figure 3.5



Regional unemployment	Proportion of total Māori population by region

Source: Statistics NZ, author's calculations

Additionally, unemployment is not spatially randomized, as Figure 3.5 above (left) illustrates its distribution throughout New Zealand's regions, color gradated light-to-dark by severity. Within the intersection between ethnicity and geography exists a difficult correlation to unravel. In the regions with the highest rates of unemployment - Manawatu, Bay of Plenty, Northland - also exist the largest numbers of Māori and Pasifika. Unemployment could therefore be the result of human capital factors related directly to Māori and Pasifika (i.e. fewer skills and lower productivity), or discrimination that is simply borne out in geographic data (i.e. Māori are discriminated against in the labor market, ergo any location with high numbers of Māori will exhibit high unemployment). Conversely, Māori and Pasifika may simply be inhabiting economically depressed regions, and thus face fewer employment opportunities. This ethnic disparity in labor market outcomes is not unique to this period, as it has defined the New Zealand social landscape since colonization, and even more prominently in the past 40 years. Māori and Pasifika generally are the last groups to see employment outcomes pick up in the growth phase of the business cycle, and the first to see them fall on the downturn.

Figure 3.6 gives data on the geographic distribution of Māori & Pasifika. It is apparent that despite the informal clumping together of the two groups, Māori and Pasifika do not exactly cohabit. Indeed, the humanities literature is rich with studies on the divergence between the two groups, and the

distinct New Zealand bicultural identity (as opposed to multicultural) places emphasis on Māori as *tangata whenua* (people of the land), with all other ethnicities - Pasifika included - considered outsiders (Hill, 2010; Harding, Sibley & Robertson, 2011).

Unless specified otherwise, the following data is drawn from the 2013 Census. This is due to the ability to pleat together data from a range of categories (e.g. ethnicity, region, labor status), which is not possible in the more frequent SNZ publications like the HLFS. It is important to note that this Census coincided with the tail end of the worst period of labor performance in around two decades. This means that the absolute numbers are incorrect, and do not reflect today's improved setting. However, proportionately, in terms of population by region, and unemployment by ethnicity, the data still remains robust for current analysis.

The Pasifika unemployment issue does not appear explainable by geographic factors. Two thirds of all Pasifika live in Auckland (it is the main port of arrival from the Pacific Islands), with a smaller contingent in the capital, Wellington. Auckland, contributing 38% of New Zealand's GDP, is considered the principal driver of the New Zealand economy, and its unemployment rate trends with the national rate. The Pasifika labor force participation rate in the Auckland region was relatively low, at 60.7%, and of those Pasifika in the labor force, 16.8% were unemployed. In Wellington, Pasifika labor market participation was higher at 66.8%, yet unemployment remained high, at 15.5%. Evidently, this group is failing to manifest successfully in the labor market, even within urban areas that supposedly provide greater opportunities.

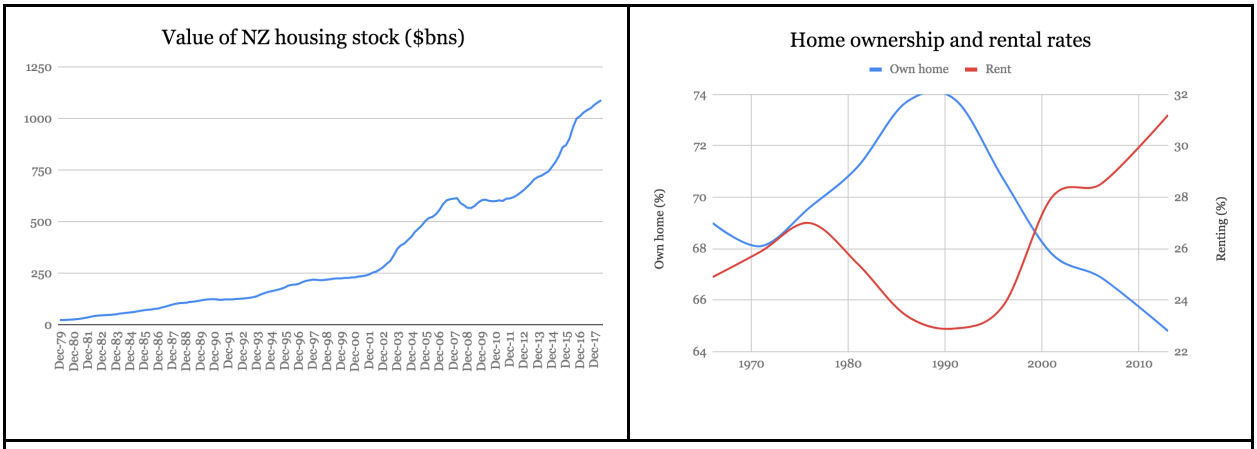
Observing educational outcomes (Figure 3.7) and other social indicators demonstrates that it is not only employment where Māori and Pasifika have fallen behind. Māori make up 51% of the prison population, and along with Pasifika, use recreational drugs and cigarettes more, while also being less physically active and more obese (Ministry of Health, 2016). The extent to which such antisocial behaviour - and a lack of intra-cultural incentives for tertiary education (the state provides interest free student loans, removing immediate financing as a sticking point) - are a result of poor employment outcomes is to be seriously considered.

An economic literature on path dependency, and specifically hysteresis in the context of unemployment, has arisen in the past three decades (Nelson, 1982; Blanchard & Summers, 1986). It has broached both sides of the economic theory 'aisle', influencing orthodox economists to reconsider the static nature of their supposed NAIRU, whilst provoking social-minded economists to think about the spider-web-type effect of an apparently localized unemployment phenomenon. If we accept the human as a dynamic, evolutionary creature - that is, what happened to somebody yesterday, and last year, has an effect on their behavior today - then the concept of hysteresis must cause reason to doubt for even the most ardent of austere conservatives.

One can provide all the anecdotes about lazy dole bludgers and welfare queens as one likes, this does not refute a demand-side explanation of unemployment; even if one accepts these unkind characterizations as being the case, it can be put forward that the long-term failure to provide employment opportunities to the groups in question have manifested these severe pathologies. We are talking not about an agent with perfect information choosing from infinite options, but instead one inextricably linked to their past, with future decisions influenced (and pessimistically, perhaps even bounded by) previous outcomes and environments. For instance, the fewer members of a cohort that have traditionally attended university, the lower the probability that future members will attend, due to the behavioral patterns of the community, and the material conditions created by a systemic lack of tertiary education. Thus, it is not surprising that without a catalytic 'jumpstart', such as the policy proposed later in this chapter, outcomes remain much the same.

Looking at New Zealand's economy more holistically than just the variable under investigation - unemployment - what do we find? New Zealand's economic recovery from the doldrums - firstly the 1990s, then the GFC - has been one of great pride for the political and monetary authorities. Despite often falling below the floor of its inflation target since 2012 (Figure 3.8), new Reserve Bank Governor Adrian Orr claimed his predecessor had been 'remarkably' successful, while the then-incumbent National Party ran on a campaign of 'more of the same' in the 2017 election, citing their strong and competent financial stewardship. Labour's simple mandate of change resonated despite numerous electoral faux-pas, and it isn't difficult to see why.

Figure 3.9



Housing prices rise while home ownership falls

Source: Reserve Bank of New Zealand

House prices, especially in high demand centres such as Auckland and Queenstown, have risen to unattainable prices for those attempting to enter the housing market for the first time. This disproportionate rise in housing values due to constrained supply has had a detrimental effect on home ownership rates (Figure 3.9, right), a variable that has been shown to correlate strongly with children's educational and professional outcomes throughout their life (Boehm & Schlottmann, 1999). Last year I wrote a paper on regional house prices in New Zealand, building a statistically significant structural model and concluding,

> The gravitational pull of Auckland, both as the economic and culture fixture of New Zealand, appears to be its residents' undoing. A constantly increasing population ensures that both New Zealanders and immigrants will be forced to pay premium prices for housing, while the government shells out over $12m each quarter to place the homeless in motels due to inadequate public housing stocks.

Bizarrely, Ardern has promised existing homeowners that despite an increase in supply through a state-sponsored building program, "house values won't drop" (Tarrant, 2017). This is an incongruent message and implies the government wants its cake and to eat it also. If the government wants to increase housing affordability, then it requires depressing housing values across the board, not simply shoehorning lucky public housing 'lottery' winners into artificially cheaper homes while maintaining inflated prices elsewhere. An OECD index on house prices relative to income places New Zealand at almost twice the OECD average, with most of the disparity arising since 2000 (Figure 3.10).

Current coalition minister Shane Jones received media attention in the 2017 election for his appearances on television, where he bellowed, "Read my lips - I'm sick and tired of watching the ne'er-do-well nephs [nephews] sitting on the couch doing nothing, and I, as a Māori politician and a Māori leader, I'm not going to tolerate it any longer" (Cheng, 2017). He was speaking specifically of the roughly 80,000 youths not in education, employment or training (NEET). However, any hope that these individuals may have had in receiving qualitative support soon faded once his government assumed power, with Employment Minister Willie Jackson, "saying he wants the government to take a back seat in tackling the issue. He argues local communities know their young people best, and the government should be bankrolling successful programmes rather than trying to tackle the issue head-on" (Donovan, 2018). A struggling demographic knows it's in trouble when the populist left-wing party stacked full of that very demographic that it voted in for assistance turns its back - 'not my problem'.

Individuals that are 'severely housing deprived' - homeless - have grown steadily in each Census since 2001 (Table 3.2). A damning 2017 UNICEF report rated New Zealand below average in several

child-relevant measures, most notably in 'good health and well-being' and 'decent work and economic growth'. Most worrying is New Zealand's mental health crisis. A young person takes their own life every 67 hours in New Zealand, and suicide is now the leading cause of death for those aged 15-19. Its link to economic outcomes has been acknowledged in internal documents:

> "At present, Northland is experiencing an unprecedented influx of suicidal behaviour in Māori youth. The majority of these youth are connected in some way to youth who have committed suicide or tried to commit this year...Suicide rates are 90 per cent higher in areas of high deprivation and the youth suicide rate is 84 per cent higher for Māori than non-Māori." an internal DHB document from August 2012 said" (Carville, 2017).

Far North Mayor John Carter pleaded with the state for assistance: "We have families where people are living with no hope and no opportunities. When someone feels like they have nowhere to go, one of the consequences is suicide." A paltry $200,000 in funding was allocated.

As has been and will be further shown, the New Zealand government's response to the issue of long-term unemployment and welfare dependency is nonsensical and damaging. The political revolving door is tacitly supporting one of two disturbing concepts: at some point, a plethora of jobs suitable to these candidates will suddenly appear despite no indication of this since the 1970s (when the government played a significant part in the employment process), *or* maintaining a bloated unemployed population is acceptable, along with the resultant social costs.

Supply-side solutions

To the supply-side focused orthodoxy, solutions to the final hurdle of stubborn unemployment – that last 2% made up largely of ethnic minorities, the long-term unemployed, and youths – entail upskilling these individuals or increasing matching efficiency. The former human capital based approach can be seen in absolute or relative terms. Absolute skills generally refer to those found in the progression through the education system, consisting of general numeracy and literacy, as well as 'soft skills' often learned by experience. Relative skills refer to those 'in demand' in the economy at a specific point, examples being IT or plumbing. These require specific training either in an institution, or on the job itself.

New Zealand does not have an absolute skills problem. In 2017, the OECD released *Skills Matter*, a 20-page analysis of New Zealand's level of skills compared to the rest of the OECD. It found, "Adults in New Zealand score above the OECD average in literacy, numeracy and problem solving in technology-rich environments" ("Skills Matter", 2017, p. 2). Moreover, New Zealand is first in the OECD in the last

metric, something increasingly crucial to maintaining productivity growth in mature service economies. Where the average proportion of adults in an OECD country that lacks basic computer skills is 14.7%, just 4.9% of NZ's adults were found technologically incompetent. However, although the OECD notes that disparities in levels of skills between ages, gender and education are 'less pronounced' in NZ than its peers, "sharp ethnic differences exist" (2017, p. 9).

The issue of relative skills has much more provenance in the New Zealand employment discussion. Over the past 15 years, New Zealand media and government have whipped up successive frenzies, as news outlets publish warnings of an impending skills crisis to which the state is forced to react by directing funding toward the threatened industry. In 2002 it was fashion (Cumming), in 2005 it was florists (Sell), and seemingly every year it is engineering and IT (Eriksen, 2012). However, there is cause to question this line of thinking. A rich empirical literature has arisen in the U.S. studying the validity of this purported problem, a notable case being Weaver & Osterman's investigation of skills shortages in the manufacturing sector. Utilizing the first nationwide industry level survey of employer skill demands, they calculated the upper bound of skills shortages to be in the region of 20%, "contrasting sharply with other, nonrandom surveys that have reported figures in excess of 60 or 70%" (Weaver & Osterman, 2017, p. 302). Charette (2013) and Salzman, Kuehn and Lowell (2013) argue against skill shortages in STEM fields, in opposition to the avalanche of claims that state the U.S., like New Zealand, is at imminent risk of its labor force becoming obsolete due to a paucity of technology skills.

Cappelli (2015) undertook a meta-analysis of what could be termed skills hysteria. He found examples of the phenomenon dating back to World War II, and cited Magnum (1990), Rosenthal (1982), and Alchian, Arrow, and Capron (1958), among others, to demonstrate either the lack of empirical scrutiny or outright falsity of countless skills shortage claims. He concludes:

> "Overall, the available evidence does not support the idea that serious skill gaps or skill shortages exist in the U.S. labor force. The prevailing situation in the U.S. labor market, as in most developed economies, continues to be skill mismatches in which the average worker and job candidate have more education than their current job requires. Persistently high levels of unemployment reflect the fact that job seekers still outnumber the available job openings" (Cappelli, 2015, p. 281).

The research shows that most New Zealanders are well matched with their jobs, with around 20% of workers having either an over or under-proficiency in a particular skill set for their job (OECD, 2017, p. 11). There is also an argument to be made that the relatively high ratio of part-time to full time-work (around 20% of all employed New Zealanders work part-time) contributes to workers being less

‘perfectly matched’ with their job, as well as the large amount of small businesses working in niche fields.

Pushing the narrative of a skills problem, often by way of the supposedly impartial and informative business survey, are multinational consultancies and ‘hiring solutions’ firms, such as Deloitte, Hays, and Pricewaterhouse Coopers (PwC). Because these firms’ services consist of increasing client efficiency by improving methods of employee intake, convincing employers of an increasingly strained hiring environment may be to their benefit. Published at the lowest point in New Zealand’s economy in some 20 years which should indicate significant labor market slack and thus favorable hiring conditions for firms, PwC’s latest report into skills in New Zealand featured such levelled analysis as, “The nightmare [of the skills gap] returns...There’s no place to hide...When economic conditions improve, employees start to look for better options elsewhere – an exodus could be just around the corner” (2017, p. 12). However the CEO should not be worried, as the prescient HR capabilities of PwC lay within a retainer’s reach. The evidence of their work may be seen in the national museum, Te Papa, where a third ‘restructuring’ since 2013 has led to dozens of layoffs (Dooney, 2018).

A Marxian supply-side theory would take a sinister view of the behaviors of these consultancies, and firms in general, in opposing measures that would eradicate unemployment. Kalecki for example thought managers opposed any labor friendly policy because it threatened the firm’s leverage over both the government and the worker:

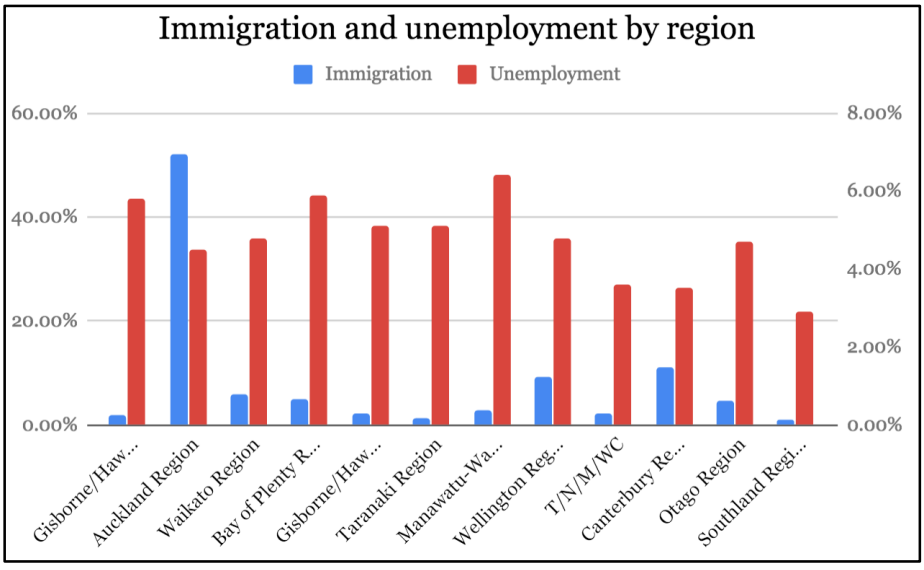
> “Under a regime of permanent full employment "the sack" would cease to play its role as a disciplinary measure. The social position of the boss would be undermined and the self assurance and class consciousness of the working class would grow. It is true that profits would be higher under a regime of full employment...But "discipline in the factories" and "political stability" are more appreciated by the business leaders than profits. Their class instinct tells them that lasting full employment is unsound and that unemployment is an integral part of the "normal" capitalist system” (1943, p. 326).

The focus now turns to other supply-side impediments. If the workers are evidently willing to work, and the jobs are supposedly there to be taken, the orthodoxy claim there must be barriers to the smooth allocation of resources (labor) to buyers (jobs). An example of this was provided in the OECD’s (2017) Economic Survey of New Zealand, where, “housing supply restrictions hinder the allocation of workers to jobs,” with the solution being to, “increase infrastructure investment needed to support better housing, and allow greater urban densification.” This is obviously in reference to Auckland, where decades of negligent urban planning have led to an endless sprawl of low density, low quality overpriced

housing. Wellington could also be implicated to a lesser extent. However, it is not clear how shifting more labor into Auckland would enable the allocation of workers to jobs. As found earlier, it houses over half of New Zealand's disproportionately unemployed Pasifika population, a culture that in the sociological literature considers unemployment a profound individual failing (Humpage, 2012). To whom are the OECD suggesting move into Auckland that isn't already there? Foreign, high-skilled workers?

This introduces a further warping of the New Zealand's government's commitment to the economic security of its citizens. Under the auspices of a lack of skills, immigration has risen to unprecedented levels, especially for a nation the size of New Zealand. 2017 saw net migration numbering 70,000, a record level, while in the year-to-date 228,000 work visas have been approved, up 4000 on the previous year ("NZ work visas", 2018). This continued growth is all the more surprising given that reduced immigration was a central pledge of last year's successful left-bloc. The Ministry for Business, Innovation and Employment publishes an annual 'Migration Trends' document, outlining the rationale behind New Zealand's immigration policy and the consequent destinations of immigrants. Under the heading of an Essential Skills Policy, the most common occupations were not doctors or engineers, but rather, "chefs, dairy cattle farm workers, and carpenters" ("Migration Trends", 2017, p. 25). The lack of coherency in this policy, whereby occupations with a relatively low level of required education are regarded as eminently urgent and 'essential' skills, led former Reserve Bank economist Michael Reddell (2015) to comment on a prior publication that, "the "skill shortages" line [that] pervades the entire document, [is] in a way redolent of a manpower planning exercise from the 1960s."

Figure 3.11



Source: Statistics NZ

A closer look at migration data confirms the irrationality of this policy. Figure 3.11 (above) shows the interrelation of immigration (left set of columns, left axis) and unemployment (right set, right axis) for each region, indicating that the supposed rationale of connecting workers with in-demand regions is not being carried out. Rather than a targeted approach that connects genuine industry shortages around the country with qualified migrants, New Zealand has placed its economic chips on Auckland becoming even more of a self-contained state, admitting tens of thousands of immigrants to the city each year while the same number of native-born New Zealanders remain unemployed. This is not a facile 'immigrant job-stealer' argument; immigrants *should* be used to plug real holes in labor supply, and when a high-productivity economy is being limited by its size. The evidence is clear that this is not what is occurring in New Zealand. The painful truth is that New Zealand's reliance on primary industries and tourism, and the consequent failure to generate productivity advancements on the back of the information age, has seen it fall from having one of the highest material standards of living in the world in the early 20th century, to currently around 30th highest. Adjusting for population growth (largely driven by migration), NZ is barely staying afloat, let alone making inroads into this issue.

This is all to say that the status quo is not working; the budget surpluses that undermine state service provisioning and encourage household indebtedness (Figure 1.7); the unemployed buffer stock that leverages societal instability for price stability; the reliance on foreign investment and migration for economic stimulus resulting in inflated metropolitan house prices; the entrenchment of labor and capital intensive primary industries that are in direct tension with New Zealand's '100% Pure' advertising slogan. A prescription that confronts all of these issues would require a much larger document than this, and in truth should set the minimum bar for the manifesto of any sensible political party. Therefore, the remainder of this paper will put forth a coherent and empirically valid policy to address unemployment.

Demand-side solutions

Having noted the failure of the now 30-plus-year orthodox experiment in eradicating unemployment through 'more free market', removing micro impediments, and rising tides, we now assume that full employment is impinged by a lack of aggregate demand, consistent with the Keynesian tradition. As such, it becomes necessary to understand the most effective means of raising aggregate demand in a manner that targets employment without causing negatively offsetting side effects. Discussed in Chapter 2, much of 20th century Keynesianism, particularly when synthesized with neoclassical microfoundations, argued for relatively indiscriminate government expenditure, referred to as 'priming the pump'. Keeping with the idea that economic growth in and of itself would generate employment, politicians revelled in reconciling opportunities to attract voters through state expenditure with a vogue economic underpinning. The

recognition of the government as an important participant in the market was previously not a given; in Joan Robinson's words, the prevailing economic attitude towards government prior to Keynes was,

> "If only they would establish free trade, restore the gold standard, keep budgets balanced, and leave the free play of the market forces to establish equilibrium, all would be for the best in the best of all possible worlds...The notion that it is the responsibility of a government to maintain a "high and stable level of employment" in its national economy was a novelty. Perhaps its acceptance as orthodoxy was mainly due to the realization that unemployment did not occur in planned economies" (1972, p. 5).

However, despite the step forward in recognizing the participatory necessity of government in a capitalist economy, any auspice of precision in pump-priming must be rejected. While the automatic stabilization capacity of some government policies - welfare and taxation - are valid, attempting to actively tame the business cycle by politically legislating rises and reductions in expenditure in concert with the cycle is in many ways akin to trying to time financial markets. Not only are the factors that need to be taken into account so numerous and complex as to be incomprehensible, but the lengthy procedure of enacting policy and the *quid pro quo* nature of politics mean a simple proposal of expenditures intended to lift the economy out of a recession may only take effect when the economy is already in another phase of the business cycle, and may also become entwined with other political jockeying and bargaining. The latter complements Kalecki's (1943) aforementioned 'political trade cycle', whereby firms exert strong political pressure against full employment policy to maintain influence over labor and the economy at large.

Furthermore, increasing government demand for output (with demand for labor as ancillary) does nothing to alleviate what Keynes posed as the second 'fault' of capitalism: "its arbitrary and inequitable distribution of wealth and incomes" (2013b, p. 372). It is unsurprising that simply growing the scale of the existing institutional framework through government expenditures, rather than reconfiguring it, simply serves to entrench issues of economic inequality. Instead of textbook Keynesianism eradicating poverty, it simply transforms it, spreading it over the existing impoverished in an alternate window dressing. Due to its tacit 'trickle-down' underpinnings, aggregate demand stimulus primarily benefits those with skills, education and job security, only secondarily and incidentally impacting those out of employment (Tcherneva, 2011). Moreover, the inflationary tendency of such policies place pressure on politicians to curtail them before they actually achieve any meaningful objective. Due to transfer payments generally contributing to aggregate demand without adding to aggregate supply, and that, "the level of aggregate demand determines the mark-up at the aggregate level over aggregate costs of

production (primarily, wages)" (Minsky, 1967, p. 330), firms face pressure to increase prices in the face of growing demand.

A thorough re-analysis of Keynes in the latter 20th century by dissident economists has provoked a deep literature on a superior means of demand stimulus that sidesteps the above problems. Many in the post-Keynesian school have settled on a policy that is commonly called a "Jobs Guarantee", "Employer of Last Resort Program", or "Public Service Employment" (Minsky, 1965; Mosler, 1997; Harvey, 1989; Wray, Fullwiler, Tcherneva, Kelton, 2018; herein referred to as Public Service Employment [PSE]). As may be evident by these titles, this policy entails state provision of employment for any citizen at any point in time, regardless of current labor force or beneficiary status, creed, or statutorily protected class. The details will be pursued further in this chapter, but first it is useful to understand the theoretical and empirical seedlings of PSE.

Noting that much of the developed world saw full employment either during World War II and the period directly following - despite experiencing capitalism's worst crisis just a decade prior - economists sought to identify the contributory factors that could be permanently transposed onto a peacetime economy. While the 'Keynesian revolution' is often-cited as opening politicians' eyes to the necessity of government expenditure in stoking demand, a muffled 'Ruml' revolution occurred a decade later in 1946. In an article titled, 'Taxes for Revenue are Obsolete', the then Chairman of the Federal Reserve Bank of New York declared, "Final freedom from the domestic money market exists for every sovereign national state where there exists an institution which functions in the manner of a modern central bank, and whose currency is not convertible into gold or into some other commodity" (1946, p. 35). Essentially, a sovereign currency issuer state may spend in its own currency any arbitrary amount without fiscal restraints. Restrictions of government expenditures are in real, not financial terms. While this was not solely Ruml's discovery - papers such as Abba Lerner's 'The Economic Steering Wheel' (referenced below) had drawn similar conclusions a few years earlier - the credibility granted by such an institutional figurehead was significant.

The ideational tipping point came from World War II, where huge deficit spending provided limitless demand for armaments and provisions, with no financial restrictions but those legislated for. From this, bankers - yet unfortunately few economists - understood that, "taxes provide the revenue for which government needs in order to pay its bills" (Ruml, 1946, pg. 35). Put another way, the government must first create the currency (through the crediting of the recipient's bank's account at the central bank) *before* it can be used in the process of its legitimization: taxation (Mitchell-Innes, 1913; Knap, 1924). This freed economists to judge the effects of a given policy rather than its adherence to some arbitrary doctrine of 'sound finance'. The revelation that money was not a proxy for gold or simply a means of exchange should have had the effect of banishing 'real analysis' - that tradition which considers money

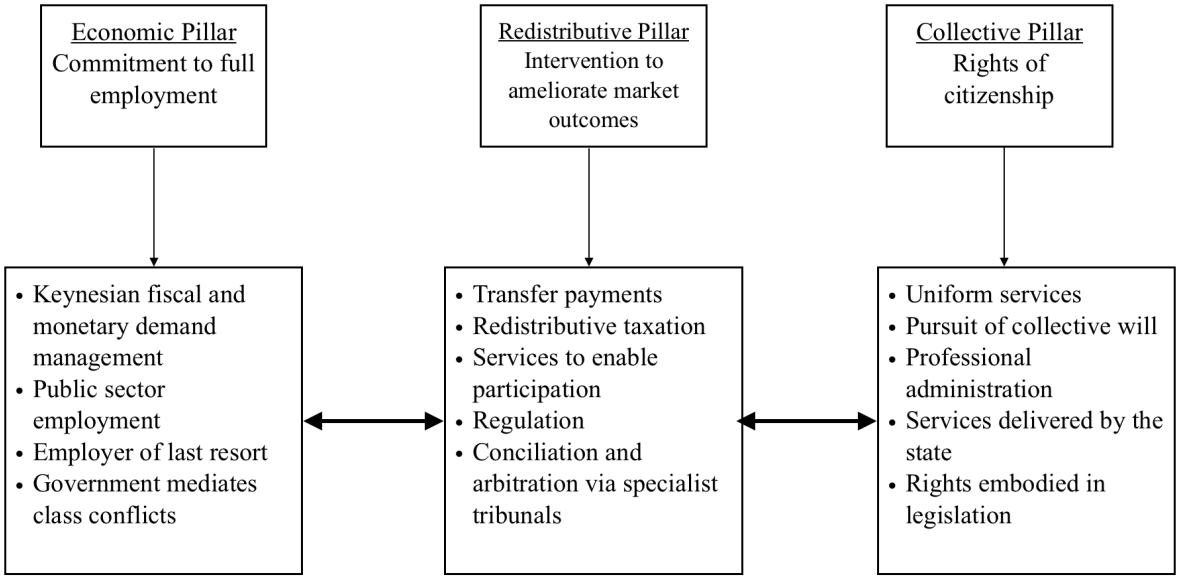
solely a transactional lubricant in a world of real variables - to the intellectual graveyard, but still today's eminent macroeconomic models maintain this as an underpinning.

With unemployment resulting from money imposed by the government, it becomes the government's responsibility to rectify this. Most economists in the decades following Keynes' 'The General Theory' acknowledged this. Even Friedman in 'A Monetary and Fiscal Framework for Economic Stability' admitted, "it would ultimately be of no great importance exactly what decision was reached about the relation to establish between expenditures and revenue at the hypothetical income level (i.e., whether exactly to balance [or] to strive for a deficit)" (1948, p. 262), although he emphasized control over the money supply, rather than effective demand, to ensure success. Abba Lerner analogized government spending as a steering wheel, left and right representing budget deficits and surpluses with balance only being found in full employment. He implored economists and policy makers to acknowledge:

> "the central idea that government fiscal policy, its spending and taxing, its borrowing and repayment of loans, its issue of new money and its withdrawal of money, shall all be undertaken with an eye only to the results of these actions on the economy and not to any established traditional doctrine about what is sound or unsound. This principle of judging only by effects has been applied in many other fields of human activity, where it is known as the method of science as opposed to scholasticism" (Lerner, 1943, p. 39).

In his later work, Lerner shied away from fiscal policy as a stimulant, preferring monetary policy. To him, "The fundamental Keynesian revolution…consisted of choosing the second method [adapting the money supply to prices] and calling on government to provide the additional money" (Lerner, 1977, p. 402). Although such a proposal entailed utilizing the now defunct 'exogenous money' theory (whereby the central bank has the ability to manipulate the money supply), it does signal an acknowledgement of greater nuance required in the application of 'Keynesianism'.

Figure 3.12 (The full employment framework)



With this in mind, governments constructed the 'full employment framework', reproduced from Mitchell and Muysken (2008, p. 8) above in Figure 3.12. This recognized in line with Article 23 of the UN Universal Declaration on Human Rights, that, "Everyone has the right to work, to free choice of employment...and to protection against unemployment" (1948). Employment was seen as providing a link to society, a crucial facet of self-esteem, and a bulwark against poverty. Not yet muddled by NAIRU paranoia, politicians agreed that full employment meant an unemployment rate of some 1-2% (made up almost entirely of frictional unemployment), or a point at which job vacancies outnumbered jobseekers (Beveridge, 1944).

Given that capitalist markets independently fail to equilibrate at full employment, or provide for those unable to participate in the market, the social welfare state was constructed. The protection of the individual from the privations of the market fell upon two supportive uprights: welfare payments for those unable to work, and employment assurance for those unable to find work. The second leg of this structure had already seen empirical testing prior to WWII, in the various New Deal programs enacted by the Roosevelt government. These included the Public Works Administration, the Civil Works Administration, the Works Progress Administration, the Civil Conservation Corps, the National Youth Administration, Rural Electrification Administration, and the Federal Emergency Relief Administration (Kaboub, 2007). 13 million Americans were employed through the Works Progress Administration (WPA) alone, revivifying the U.S. infrastructure that would become an essential element of wartime

production. The corollary to this in New Zealand was the Ministry of Works and Development, and the numerous public sector agencies dedicated to providing public services, as described in Chapter 1.

Public Service Employment theory

Unfortunately, the theoretical argument for direct employment policy as an alleviant to unemployment dwarves its empirical one. As neoliberalism took back ownership of the economic steering wheel (to use Lerner's analogy) in the 1970s and 1980s, governments washed their hands of any culpability in ensuring full employment, taking a self-imposed neutered position in the corner of the picture where it could do as little damage to the free market as possible. The full employment framework became the full employability framework, characterized by the pedestalization of market-based outcomes, intervention only insofar as it mimicked or promoted market outcomes, the erosion of inalienable rights of citizenship in favor of individual responsibility, and the acceptance of non-uniform service provision to the community based on that community's standing in the market (Mitchell & Muysken, 2008). Through this wholesale reimagining of the relation between the state and its people, governments began to view themselves as necessary evils, required only to provide those services which capitalism fails to provide of its own accord. In this model, the government is a black box which the citizenry funnels money into, churning out services worth less on aggregate than the initial 'payment' due to the corruption and wasteful bureaucracy that are apparently undivorcable from the concept of the state.

Panić (2006) observed the outcomes of seven countries - U.S., U.K., France, Germany, the Netherlands, Norway, Sweden - in an almost two-decade period following neoliberalization, finding:

> "In summary, two important conclusions emerge...First, whatever the model of capitalism, economic growth slows down and unemployment rises if a country adopts the classical approach to macroeconomic management advocated by neoliberals. In contrast, whatever the model of capitalism, the Keynesian approach to macroeconomic management...will improve economic performance. Second, those models of capitalism that give high priority to social well-being, solidarity and trust have an important advantage in minimising the impact of a stagnant environment on economic welfare" (p. 155-61).

Noting that the government must take an active stake in economic outcomes, and that this stake must be more nuanced and holistic than is traditionally thought, we consider PSE.

A PSE program works by anchoring price stability with a buffer stock of the employed, as opposed to the current system that maintains a buffer stock of the unemployed (of which New Zealand was the first to explicitly implement, through single mandate inflation targeting). Currently, the business cycle inefficiently spits out the workers with the most fragile labor market footing into unemployment during a downturn, whereupon their skills atrophy and they face impoverishment. When the market heats back up, firms skim the top of this pool of workers to bring back into employment. This system is justified because of the downward pressure that the prospect of unemployment places on wage demands, 'taming' inflation. As has been observed, however, with each period of churning of workers at the bottom of the business cycle, they spend longer and longer in unemployment, reducing their chances of gaining employment in the recovery, which is an, "asymmetry [that] produces *jobless recoveries*" (Tcherneva, 2017, p. 7, emphasis added).

When setting their budget, the government decides on an *amount* to spend on items at the market price, an amount dictated by arbitrary constraints or ideological dispositions. This then has some effect on the economy, perhaps bringing it to full employment, but almost certainly not. PSE on the other hand proposes anchoring price stability by setting a *price*, say, of the largest and most common input, labor, at which it offers to purchase all willing supply. In this sense, the market itself determines the level of government spending adequate to provide enough jobs for anybody who wants one. For argument's sake, if the government decides that it is spending 'too much' on PSE it need not undertake layoffs, but simply reduce its offer price, whereupon the supply of labor will adjust accordingly and settle at full employment again (albeit with a lower quality of life for the participants). Instead of, at best, blindly estimating some level of spending that will engender full employment or, at worst, deliberately spending too little to do so, PSE solves the problem outright.

An employment buffer stock is superior not only to an unemployment buffer stock, but also to a commodity buffer stock. While a government may choose (and often does) to offer to purchase all widgets at a fixed price, this invites debate into the 'reasonable' amount of output at a given time, and may encourage overproduction of the widget. This is not an issue with labor, lest one supposes those who become employed through PSE will rush to reproduce at a higher rate. In the terminology of Graham (1937) who describes various methods that the state may use to handle a surplus (in our case, of labor), the unemployment buffer stock consists of 'dumping' it, whereas PSE proposes conserving or storing it, where, "the reserve is established to meet a future need which experience has taught us is likely to develop" (p. 35).

A PSE program would take those workers who were unemployed and employ them productively at a living wage. This wage then becomes the effective minimum wage in the economy, as anybody may choose to work in the program at the specified wage (as opposed to a legislated minimum wage to which

private firms must adhere). Ideally, PSE does not directly compete with private sector firms for workers, but it may be inevitable that if the PSE wage exceeds the current minimum wage, some firms may find it difficult to attract workers. On the one hand, even economically mainstream organizations like the OECD (2006) are having to acknowledge the lack of direct relationship between the level of the minimum wage and unemployment, while on the other, if a firm cannot pay the societally determined 'living wage' that keeps its workers out of poverty, its ongoing profitability should not be guaranteed. Moreover, the breadth of programs like Work for Families and the Accommodation Supplement demonstrates the lengths the government is going to to effectively subsidise employers paying wages less than what one can reasonably live on, and this in a post-GFC 'rockstar' economy no less. Finding the balance between a wage that fights poverty and one that keeps small regional firms viable will always be a challenge for governments. In saying that, the multiplicative power of PSE employees spending their incomes would significantly add to GDP, likely contributing to the bottom line of well-run firms.

The jobs themselves would be scattered regionally, targeting specifically those areas suffering from high and persistent unemployment. Local governments and non-profit organizations may apply to the central government for support of a particular project - examples given below - whereupon the central government funds the cost of its employees (plus a capped subsidy for materials). As opposed to regular contracted infrastructure projects funded by the government which often require workers to travel to remote, purpose-built shanty-towns, PSE takes the work to the employee. There are several reasons for this. Firstly, it removes any financial or familial barrier to gaining employment. Uprooting one's life (and perhaps family) to move to a PSE job in a distant location is a difficult proposition. Secondly, it promotes the beautification and rejuvenation of those very towns that suffer from persistent unemployment. Localizing the multiplier effect of the spending from PSE incomes ensures a benefit to the community beyond the work done or services provided. Thirdly, it supports the residual reality of PSE. PSE employees are 'residual' in the sense that they are what are 'left over' after the rounds of private labor market operations. As the business cycle fluctuates, so too will the volume of this residual. By creating employment opportunities where the unemployed are already located, it smooths the transition from public to private employment, while also recognizing that some PSE jobs will oscillate in and out of existence with the business cycle. This prompts a discussion of the jobs themselves.

To the layman, a PSE proposal brings to mind massive state endeavors, such as Muldoon's 'Think Big' scheme. However, undertaking large infrastructure projects makes little sense as a PSE rubric. Firstly, it would violate the above principle of bringing employment to the unemployed. Secondly, there is no significant infrastructural undertaking accomplishable with an entirely unskilled, or at best low-skilled, workforce. The high skilled tasks would then need to be contracted out as part of a public-private partnership. This introduces the third problem of meshing PSE with infrastructure projects,

attributable to the oscillating nature of the program. It is probable (desirable, even) that in a business upswing, some PSE employees will take higher paying jobs in the private sector. This would then leave the infrastructure project short-staffed and on hiatus. No private contractor would be willing to undertake a project not knowing at any point if the lion's share of its unskilled workforce (of which it has little contractual control over) will desert.

Therefore, the jobs would be local and of direct benefit to currently underemployed communities. Examples of projects are the cleanup and rehabilitation of vacant or rundown public spaces in Gisborne, planting of trees and waterway protection around the Waikato, an artistic co-op producing public works in any town, and even the childcare of current PSE employees. Far from the 'digging holes and filling them in' style make-work that is improperly attributed to Keynes and espoused by current government ministers such as Shane Jones and Winston Peters, this would be fulfilling in its direct connection to the local community while providing services deemed privately unprofitable. Wray *et al.* segmented potential jobs into three categories: care for the community, care for the environment, care for the people (2018, p. 39). There is some nuance required in determining the nature of jobs. Traditionally, public sector jobs are formed on the basis of some public 'need' not being met by the private sector and with a value measurable by usage, whereas PSE jobs should not be susceptible to usage fluctuations, instead conforming to private sector labor demand fluctuations. Mitchell *et. al* (2006) outline four criteria that PSE jobs should meet: (i) they should not displace private or sector workers in order to remain counter-cyclical, (ii) the entry and exit process must be streamlined to allow free movement between PSE and the private sector, (iii) PSE services with greater demand for 'continuity' from the community should be prioritized during contractions, and (iv) jobs must be sufficiently differentiated in terms of difficulty and responsibility.

The execution of PSE would likely fall upon the Ministry of Social Development (MSD) or the Ministry for Business, Innovation and Employment (MBIE). As well as receiving and adjudicating on individual proposals, they would maintain records of each PSE employee online as well as a public database of projects undertaken past and present. Local communities should have the ability to tender their opinions of projects, as well as collectively put forward plans for new ones. The administrative aspects of PSE in each region can be handled by the multitude of pre-existing Work and Income New Zealand offices that are currently concerned mostly with welfare support programming.

This targeted approach to demand stimulus stands in contradistinction to the pump-priming method discussed earlier, by reducing the volatility of the business cycle while also acting to stimulate primarily those at the bottom of the income distribution in a 'bottom-up' (rather than 'top-down) movement. In the first instance, a PSE program is an effective fiscal stabilizer; when the economy booms, PSE workers take higher paying jobs in the private sector causing a reduction in fiscal expenditure, and

when the economy contracts the PSE program takes in more workers, growing fiscal expenditures. General countercyclical spending funnels money into industries and regions with established, skilled work forces, with the implication that the re-spending of these incomes into the community will provide positive flow-on effects for the less skilled. However, the transmission mechanism from those who initially earn it (who incidentally have a lower marginal propensity to consume than those living hand-to-mouth) to the impoverished is at best murky, especially if New Zealand's failure to address child poverty is anything to go by. As Minsky quipped, 'Harlem is not Scarsdale', and so too Papatoetoe is not Ponsonby. Recognizing the duty of government to alleviate poverty, PSE takes the direct approach by growing the incomes of those in the bottom quintile by offering a two-parent household 80 hours of paid work a week.

Implementing Public Service Employment

As a result of the artificially constricted fiscal climate we inhabit, the inevitable first question any policy proposal faces is: how much will it cost? There is the sticker price of a policy - those expenses related to its implementation and maintenance - and also its opportunity cost: the other policy or policies that may be cut or curtailed in order to maintain fiscal 'neutrality'. Bemoaning dollars and cents mania is futile, and, at least for the time being, the effort is better spent framing and adapting any progressive policy into something politically workable. Before proceeding, it must be noted that the estimate provided in this paper is extremely imprecise; determining an exact figure requires econometric modeling beyond this author, and the utility of such an exercise at this preliminary point is arguable. As a guideline, I will draw on the calculable methodology of Philip Harvey's (1989) 'Securing the Right to Employment', and the descriptive criteria used in Wray *et al.*'s (2018) 'Public Service Employment: A Path to Full Employment'. Additionally, I add the assumption of estimating the cost of the program if it were implemented in the 2018/19 fiscal year, not at some idealized point in the future. This provides a figure more suited for current analysis and comparison.

The first order of business is estimating the number of people that such a program would employ. This entails taking the three distinct groups of working age citizens - the employed, unemployed, and those out of the labor force - and isolating particular subsets of these groups, assigning a somewhat arbitrary probability to said subsets of taking a PSE job. Secondly, one must choose a program wage, and the number of hours the average PSE worker would work. Thirdly, using the above factors we may approximate a cost of the program, after taking into account increases in income tax revenues and the reduction of current means-tested welfare programs, many of which would presumably become

superfluous with the availability of at least one full-time income per household. Finally, with the estimated cost, we can make an estimated guess at the impact on the government's fiscal position and other macroeconomic variables.

The simplest group of citizens to estimate for are the current unemployed. As of the most recent Household Labour Force Survey (June 2018), 124,000 New Zealanders do not have a job, but took steps to find one in the previous four weeks. As per the 2016 revision to Stats NZ's definition of unemployment, simply browsing job advertisements does not qualify one as unemployed, and they would be deemed out of the labor force. Of those 124,000, 11,000 are in formal study, such as university or polytechnic. I assume that this small cohort would be less likely to take a PSE job than those unemployed not also in study, and I have thus assigned a probability of 50% that the unemployed in study would take a PSE job. For the remaining 113,000 unemployed, I used duration of unemployment as a probabilistic marker, which was Wray *et al.*'s lower bound criteria (their higher bound criteria, reason for unemployment, is not available from the HLFS). While those unemployed less than five weeks (25% of the unemployed) may choose to remain unemployed at the prospect of securing a more favorable private sector job, beyond this point it becomes more likely that they would accept a PSE job. Therefore, we will use 75% as the probability that the 'regular' unemployed would take a PSE job, assuming that those unemployed less than five weeks who *do* take a PSE job, and those unemployed longer than five weeks *do not* take a PSE job, average out.

There are two subsets of the currently employed who are likely participants for PSE: those working part-time involuntarily (i.e. would like to work full-time but are only employed part-time), and those currently working in de facto below-minimum-wage positions or in unfavorable working conditions. While we can estimate the first subset, there is no known survey of the second in New Zealand, and thus they will be regarded as indeterminate. There are currently 548,000 employees working part time in New Zealand (11% of employed men work part time, 31% of employed women). Of this contingent, 112,800 were estimated in the recent HLFS to be desiring more hours, or to be part time involuntarily. Deciding how many of these may take a PSE job is no exact science. Wray *et al.*'s higher bound and lower bound was 100% and 50% respectively, while I will choose a conservative middle ground of 66%. This leaves us with 75,200 participants from this group.

Finally, we estimate the number of participants that would enter the labor force to take a PSE job. There are currently 1,130,000 individuals out of the labor force, approximately half the number of those in the labor force. The lion's share of these are in static conditions: retirees, caregivers, students and so forth. There are currently 82,000 people in this group who are not actively seeking work, but would accept a job, while 21,000 more are jobseekers, but not available for work in the next four weeks. I tend toward Harvey's acknowledgement that 'discouraged' workers represent a "tenuous desire" rather than a

definite one, and again took the middle ground between Wray *et al.*'s higher bound and Harvey, at 70%. Of those not available right now, I chose 50%.

These figures are collected in Table 3.3, giving an estimated total of 213,200 New Zealanders that may have participated in PSE in 2018. This is some 4.5% of the total population, sitting within Wray *et al.*'s higher and lower bound for the USA, 3.9% and 5.4% respectively. With this, we then must determine the hours of an average work week. While, based on the OECD's estimate of hours worked, this works to be around 34 hours, I believe the preponderance of those entering the workforce choosing to disproportionately work part time, as well as the likelihood of some current part timers simply adding part time PSE work to their schedule may drag the average down to 32 hours. Were this enacted in 2018 (after the 75 cent minimum wage increase from April 1), the hourly wage paid would have been $16.50. This is currently mandated to increase to $20 per hour by 2021. Finally, I assumed 48 weeks of work per year, in keeping with the standard four weeks of annual leave granted to employees in New Zealand.

Inputting the above values for the three variables of number of employees, wages and hours gives a total annual wage cost figure of NZ$5,403,340,800 (herein all dollar values are New Zealand dollars). To determine total employee costs, benefits must be added. My calculation of 10% ($540,334,080) is lower than other US-centric studies, which included private health insurance. Also calculated as a proportion of wage costs are material costs. This expenditure from the central government recognizes the necessity of ongoing investment in projects beyond labor, and would support implementation of regional projects to ensure they do not lie idle due to inadequate supplies. Given the WPA's scale and availability of data, I used an average of its material costs (25% of wage costs for materials on large capital projects, and 15% for small, community driven ones), arriving at 20%, or $1,080,668,160. Therefore, given the above assumptions, the total outlay on PSE in 2018 would have been $7,024,343,040 (a little over $7bn).

There are two factors that would significantly offset this figure, one that will be accounted for, and one that will not. It is reasonable to expect that, as Harvey perceptively noted, "procurement expenditures would create additional jobs in the private sector, thereby reducing the number of jobs that the program itself would have to create" (1989, p. 41). He goes on to argue that since almost 60% of expenditures on final goods and services in the US at the time accrued to employees as wages and compensation, the same percentage, "could probably be counted as the macroeconomic equivalent of funds spent for EAP [Employment Assurance Program] employee compensation…[thus] when adding a sum for materials procurement to an estimate of EAP program costs, it should be possible to subtract almost 3/5ths of that amount from the programs estimated employee compensation bill" (p. 41). In other words, since the materials cost portion of a PSE program is in itself creating additional private sector jobs (with a multiplier effect of 0.6 in Harvey's approximation), these jobs would not have to be provided for PSE, and thus that amount (in our case, $648,400,896) could be subtracted from the $5,403,340,800 wage

bill. This is worth noting, but will not be applied due to the near impossibility of accurately correlating variations in private sector employment as a result of PSE.

The second factor that will be accounted for is the increase in government tax revenue as a result of the increased incomes of PSE participants, and of the taxes paid on materials by private businesses. For incomes, we use the 32 hour work week to calculate this, again acknowledging that this will underestimate the tax payments of those working in PSE full time, and overestimate those working in PSE part time as a supplement to existing part time work (of which they already pay tax). Given an average annual income of $25,344, income taxes would amount to $3,455 for 2018. This amounts to $736,648,640 for the entire program. Secondly, at a rate of 15% (Goods and Services tax), taxes paid on material costs would total $162,100,224. Together, this equals a total tax saving of a little under $900m.

The summation of these costs and savings are in Table 3.4. As a stand-alone policy, guaranteeing employment for every New Zealand at an effective minimum wage would have cost the New Zealand government an estimated $6,125,594,176, or 3.3% of 2017's GDP.

By adding this second 'leg' to New Zealand's welfare structure, there will be an inevitable reduction in expenditures on the first leg. With greater poverty prevention in the form of direct incomes, fewer ambulances will be needed at the bottom of the cliff in the form of transfer payments. The largest of these programs currently in place are Jobseeker Support, the new Winter Energy Payment (WEP), Working for Families tax credits, In Work tax credits, Improved Employment and Social Outcomes Support (IESOS), and Social Housing Purchases. A summation of the costs of these programs are provided in Table 3.5. This list is by no means exhaustive, as there are dozens of programs that come under the auspice of income supplementation. Jobseeker aids those either officially unemployed, underemployed, or disabled in finding employment. It provides a weekly payment ranging from $143 to $384, and in the most recent survey there were 122,513 recipients. It is likely that many involuntary part-timers do not seek a benefit as they are still above the means tested threshold, and some of the unemployed (especially of a shorter duration) have not applied for a benefit. This program could be completely disbanded with the introduction of PSE. Although the WEP and Social Housing Purchases are a result of the failure of the private market to provide livable incomes, the fact that they are not means tested (at least in the case of the WEP which is a blanket cash payment; access to social housing *is* means tested, but is a much more convoluted issue and I would not desire the curtailment of this program) leaves space for them to remain enacted despite a growth in lower quintile incomes.

The main two tax credits, WFF and In Work, "provide payments to low to middle income families," with dependent children, with the latter specifically tailored to those who work over 20 hours (30 if they have a spouse) and still fall below an income threshold deemed necessary to provide a reasonable standard of living. In common parlance, the working poor. The most recent budget costed

these together at roughly $3.1bn. Evidently, moving families up the income scale, especially in the cases of providing more hours for the working poor, will drastically reduce the demand for this system.

Finally, IESOS exists in order to, "operate the benefit system in such a way as to improve *client* outcomes (employment and social) by moving them closer to independence" (my emphasis). This $688m outlay therefore is a simply lubricant for the full employability framework discussed in chapter two, stressing the primacy of pushing beneficiaries toward 'better' market operations in its directive.

A reduction or elimination of WFF, Jobseeker and the many related programs suggests that PSE could feasibly be fiscally neutral. The above analysis did not take into account changes in indirect spending on social issues, for example incarceration, mental health and drug issues. It is not a great leap to assume that the eradication of persistent unemployment in problematic areas would reduce these ancillary costs, which moreover are often levied at the regional or city council level.

It is also possible to estimate a multiplier effect of the program. This represents the macroeconomic stimulus provided by PSE participants spending of their incomes, and can be found by: $\frac{1}{[1-\square(1-\square)+\square}$, where *c* is the marginal propensity to consume, *t* the tax rate, and *m* the marginal propensity to consume imports out of disposable income. Using the inverse of the median marginal propensity to save (calculated to be 0.17 for New Zealand by Le, Gibson & Stillman, 2010) as a proxy for the MPC, 0.25 for the propensity to consume imports (Parker, 2014), and 17.5% as the effective tax rate, I find the following: $\frac{1}{[1-.83(1-.175)+.25]} = 1.77$. This is a conservative estimate, as the MPC of program participants is likely to be much closer (if not equal) to 1. Nevertheless, this indicates that a PSE program would have a stimulatory effect to the effect of $9.5bn annually from wages and subsequent rounds of spending, reducing the cost of the program as a percentage of GDP.

With a medium-term target of 1-3%, inflation has risen above 2.5% in only one quarter since the GFC, and not more than 7% in some three decades ("Inflation"). 2015 and 2016 bordered on deflation, with levels holding below 0.5%. Housing supply pressures aside, which should ideally be attenuated through the government's ongoing KiwiBuild program, the New Zealand economy faces little inflationary bias, with wage growth this year touching 2% for the first time in half a decade on the back of extensive union action. Due to the inherent nature of a PSE program as an anchor for price stability, its effects on inflation would be muted, as demonstrated by the findings of Wray *et al.*'s use of the Fair model, where inflation, "peaks at 0.74 percentage points higher than the baseline projection and then progressively falls to a negligible 0.09 percentage points higher than the baseline by the end of the simulation period" (p. 6).

Employment guarantees elsewhere

While a PSE program as described above has not been explicitly maintained by a developed economy indefinitely, there are several quasi-PSE experiments that illustrate its practicality, as well as the post-war period of 'Keynesian' government policies where applicants had high confidence in finding a job in the public sector, within reason. In New Zealand, the protections of a 'welfare state' for citizens were embedded within its foundational structures, as the often harsh pioneer-style living and lack of traditional corporate or civil safety nets encouraged an active state. I spoke of the roots of New Zealand's public sector in Chapter 1, and its gradual demise under neoliberalism. Little more needs to be said here other than this trend is unlikely to reverse, with the recent Key administration eliminating thousands of jobs, with then Finance Minister Bill English warning, "the squeeze is only starting on the public sector" (More public sector jobs to be cut", 2011). A cap of 38,859 jobs was enacted, yet even this was not met, and the cap was revised down to 36,475 positions.

Sharp distinction to the words of English may be found in those of Franklin Roosevelt upon his inauguration: "This nation asks for action, and action now." These were spoken in light of the abject social conditions induced by the Great Depression, and almost immediately his gigantic 'New Deal' was enacted, with the Works Progress Administration (WPA) becoming the largest individual public employment program of its time. It provided employment to effectively any applicant at a wage reflective of the region's cost of living. The Federal government worked in concert with municipal and state authorities to source and fund localized projects, ranging from green space to schools. At its peak, it employed over three million workers, and almost nine million had been employed in some manner by its disbandment in 1943. In his analysis of the project, Nick Taylor (2009) emphasizes the importance of the infrastructure that arose from the program to the US' wartime production readiness, as well as the general overhauling of outdated and inefficient public works.

The most explicit analogy to the WPA in New Zealand was the Department of Public Works. Established in 1876 and disbanded (privatised) in 1988, its express purpose was, "to ensure that, whilst the building and constructional potential...is assembled and utilized in the most efficient manner from the point of view of the national interest" (McKillop, 1946, p. 9). Under its guidance, almost two dozen major infrastructure projects were completed, including railways, dams, and power stations still in operation today. This was a decentralized operation that held offices in the seven largest regions, each having various depots dedicated to particular projects. The Department of Public Works was a useful absorbent of excess labor, averaging around 20,000 wholly or partially subsidized employees in the middle and latter post-war period ("The New Zealand Official Yearbook", 1968).

Alongside this ministry were the more permanent fixtures of the post office, railway, and forestries. Also counted within a socialized public sector was education, healthcare, the police and the armed forces, totalling some 234,403 employees in 1977, or roughly 20% of the total labor force ("The New Zealand Official Yearbook", 1977). Today this figure is 13.8%, a reflection of a greater demand for allocative efficiency in the public sector, and consequent privatization. If the premise is accepted that New Zealand materially lagged behind much of the developed world in the latter post-war period, I maintain that it was as likely to be a result of strict capital and import controls, little competitive pressure as a function of guaranteed access to UK markets, and stagnant productivity due to a reliance on primary industries, as it was due to a larger public sector that, among other things, maintained an extensive transportation network, attempted to induce greater energy independence, and fortified the road network.

Undoubtedly the largest, and indeed one of the most successful, examples of employment assurance globally is India's National Rural Employment Guarantee Act (NREGA). Enacted in 2005, NREGA operates in the largely impoverished Indian countryside, guaranteeing up to 100 days of paid work to households each year. As opposed to previous employment schemes in India that were strictly targeted at poverty alleviation, NREGA takes the stance that employment is a right of citizenship. It provides income to some 110 million households annually, while $46bn worth of assets have been created through the program to date ("Active Workers 2018-19", 2018). However, it is by no means flawless. Uneven implementation across states has meant many of the most needy states, such as Bihar and Odisha, lag far behind the wealthier southern states in providing employment, and moreover, data from 2012 shows households in the majority of states are not able to secure a full 100 days each year (Thapa, 2013, p. 3). This may be in part due to the politicization of the program, with little transparency and a tightening of the supply of work.

South Africa's 2004 Expanded Public Works Programme (EPWP) is a self-described 'key tool' for labor absorption and income relief. Workers are employed either directly by the public sector, or through NGOs who receive state funding. A differentiating feature of EPWP from NREGA is that its focus is not solely on asset creation through the building of infrastructure, but a broader social agenda that includes child and aged care. This has been commended for its contribution to gender equality in the labor market, as these often unpaid community or familial based tasks are usually assumed by women (Antonopoulos, 2013, p. 12). To date it has created approximately four million full-time-equivalent jobs (1 FTE = 230 days of work).

Plan Jefes de Hogar (*Jefes*) came into action in Argentina in 2002 by presidential decree, constituting a more comprehensive implementation of the pre-existing successful yet restrictive *Trabajar* 'workfare' program. Following a severe economic crisis, where unemployment and inflation climbed while the value of the peso plummeted, *Jefes* initially promised 150 pesos each month (for at least four

hours of work per day) to households that satisfied a strict set of criteria such as having dependent children, a pregnant woman, or disablement. Wray and Tcherneva travelled to Argentina several months after its enactment, speaking to participants and administrators about experiences and perceptions of the program. They found 90% of those surveyed either 'satisfied' or 'very satisfied' with *Jefes*, while over 70% claimed that the work through the program caused them to feel 'respected', rather than burdensome or 'politically used' (Tcherneva & Wray, 2005, p. 6). While *Jefes* did not offer an infinitely elastic demand for labor such that this paper proposes, its ability to hire 'from the bottom' and help arrest a precarious social environment in a time of crisis, illustrates the marked benefits of a PSE style program.

Conclusion

Despite the cultish refrain to the contrary, New Zealand's economy - its people - is struggling. With over 100,000 people unemployed, and hundreds of thousands more either needing additional work or discouraged from looking for it after repeated failures, successive governments continue to hide behind arbitrary figures of GDP growth and price stability. New generations only see a dissonance between the model progressive utopia of the media and years gone by, and the reality they experience every day, replete with record high suicide and homelessness rates, stagnant wages, unaffordable housing, and worst of all, no coherent political vision to set it right.

Confronting the issues borne out by disenfranchisement from the market mechanism requires matching the boldness and vigor shown in 1984 that catalyzed the current malaise, only put toward a positive social vision that finally prioritizes those at the bottom. While the public policy proposal of this paper is no panacea - as the free market has also proven not to be - it could help make up an ambitious reimagining of the New Zealand economic structure, one that recognizes a prosperous working class can only assist capital in making productivity gains.

We began by observing the evolution of the New Zealand economy in its short life, and the trends of employment within it. This search emphasized the disturbing effects of the economic policies heralded by the fourth Labour government in the 1980s, commonly referred to as 'Rogernomics', followed by the subsequent National government's 'Ruthanasia', all in the name of economic efficiency. It was shown that not only has unemployment remained untenably high, but it is spatially and ethnically concentrated, resulting in two markedly different perceptions of the economy depending upon one's experience with it.

Both traditional demand and supply side solutions were considered, and each found wanting. While the former fail to attenuate volatility or address income inequality, the latter are empirically baseless, and still operate within the framework that unemployment is an individual problem, not the inevitable result of a capitalist economy with a lackadaisical state. An alternative that recognized the realities of modern money was proffered - PSE - ensuring both price stability and full employment, as well as being a multiplicative boon to aggregate demand.

If we assent to poverty - and by extension, unemployment - being any less than the primary economic objective, then we are placing some other goal above that of human wellbeing, and it is of this author's opinion that no economic aspiration - efficiency, price stability, absolute output - may wrest this crown from the people justifiably. Constructing and solving elaborate mathematical puzzles over the coefficients of parameters for decades demonstrates a lack of social responsibility in much of the field, prompting Lord Skidelsky to lament, "Rarely in history can such powerful minds have devoted

themselves to such strange ideas" (2009, p. xiv). Like many other university subjects, economics is undergoing a crisis of legitimacy, and must illustrate its usefulness in the face of skeptical public opinion.

New Zealand must not acquiesce once again to the prominent opinions of its larger allies - politically or intellectually - and must demonstrate bravery in putting its people first, such that it has so often in its short history. It was New Zealand that first granted women voting rights, it was New Zealand that fought apartheid, that stood as an anti-nuclear bastion, that banned zero-hour contracts, and it is New Zealand that must again stake its claim as the most progressive nation in the world, by guaranteeing the wellbeing of every citizen through the provision of a good job at a living wage.

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Appendix

Table 3.1 (June 2018 HLFS)

Number of employed	2,663,000
Number of unemployed	122,000
Not in labor force	1,130,000
Not in employment, education or training	73,000
Unemployment rate	4.4%
Labor force participation rate	67.8%
Employment rate	70.9%
'Underutilization rate'	12%
Total hours worked (average week)	91,416

Table 3.2

	2001		2006		2013	
Category	*Count*	*%*	*Count*	*%*	*Count*	*%*
Severely housing deprived	28,649	0.8	33,295	0.8	41,705	1.0
Not severely housing deprived	3,639,845	97.2	3,942,626	97.1	4,109,534	96.6
Housing deprivation status cannot be determined	76,038	2.0	83,953	2.1	103,356	2.4

Source: Otago University

Table 3.3 (estimate of PSE participants)

	Total	PSE
Unemployed	124,000	
In formal study	11,000	5,500
Not in formal study	113,000	64,500
Total from unemployed		70,000
Employed		
Involuntary part time	112,800	75,200
Paid under minimum wage	Indeterminate	
Total from employed		75,200
Not in labor force (NLF)		
Available potential jobseekers	82,000	57,500
Unavailable jobseekers	21,000	10,500
Total from NLF		68,000
Total PSE		**213,200**

Source: Statistics NZ, author's calculations

Table 3.4 (estimate of PSE cost)

Costs		
Wage costs	5,403,340,800	
Non-wage costs	1,080,668,160	
Benefits	540,334,080	
Savings		
Tax savings	(898,748,864)	6,125,594,176

Source: Statistics NZ, author's calculations

Table 3.5

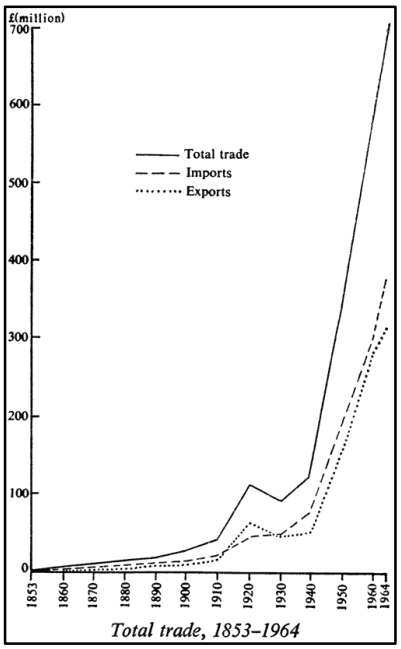
Completely or partially redundant existing policies ($NZ)	
Jobseeker Support	1,711,942,000
Winter Energy Payment	460,000,000
WFF Tax Credits	2,628,000,000
In Work Tax Credits	540,000,000
IESOS	688,000,000
Social Housing Purchases	1,000,000,000
Total - Means Tested Benefits	5,567,942,000

Source: Ministry of Social Development

Figure 1.1

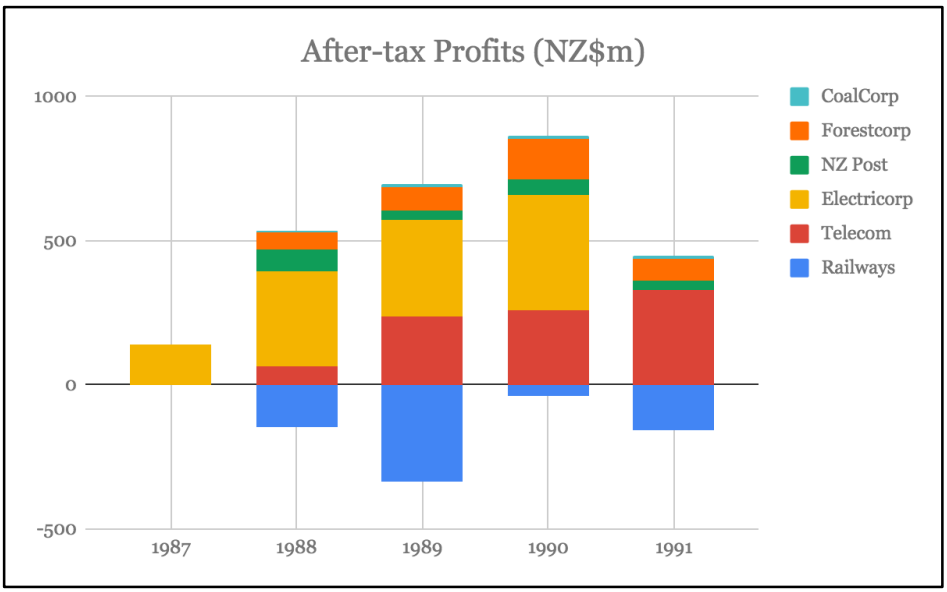
Source: Te Ara encyclopaedia

Figure 1.2



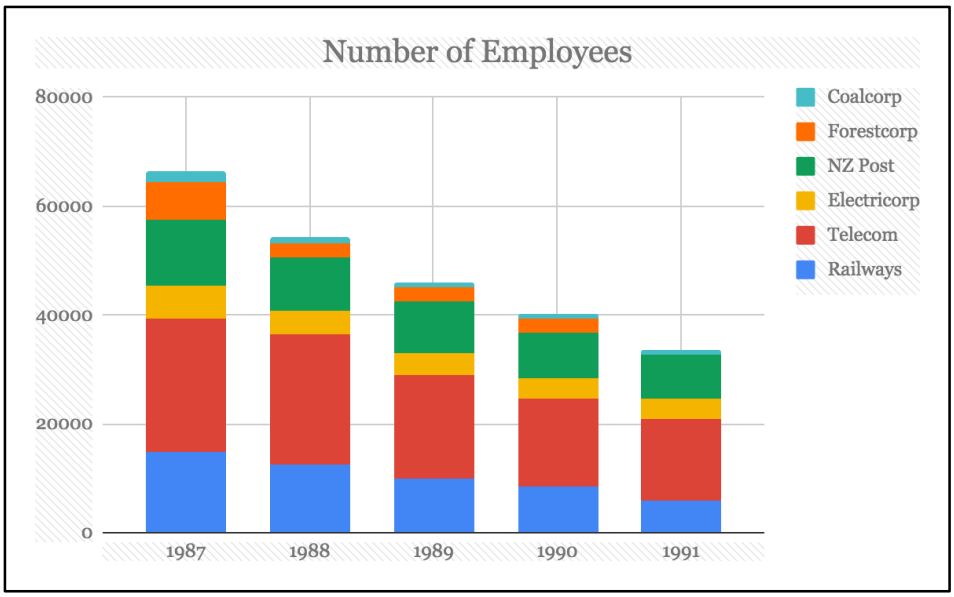
Source: 'Total trade, 1853–1964', from An Encyclopaedia of New Zealand, edited by A. H. McLintock, originally published in 1966

Figure 1.3



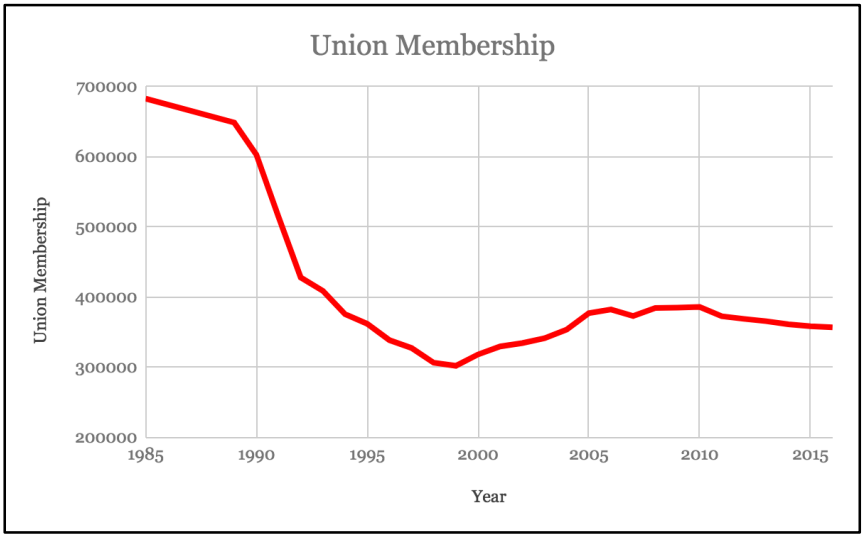
Source: *Jane Kelsey: 'The New Zealand Experiment'*

Figure 1.4



Source: *Jane Kelsey: 'The New Zealand Experiment'*

Figure 1.5



Source: New Zealand CTU

Figure 1.6

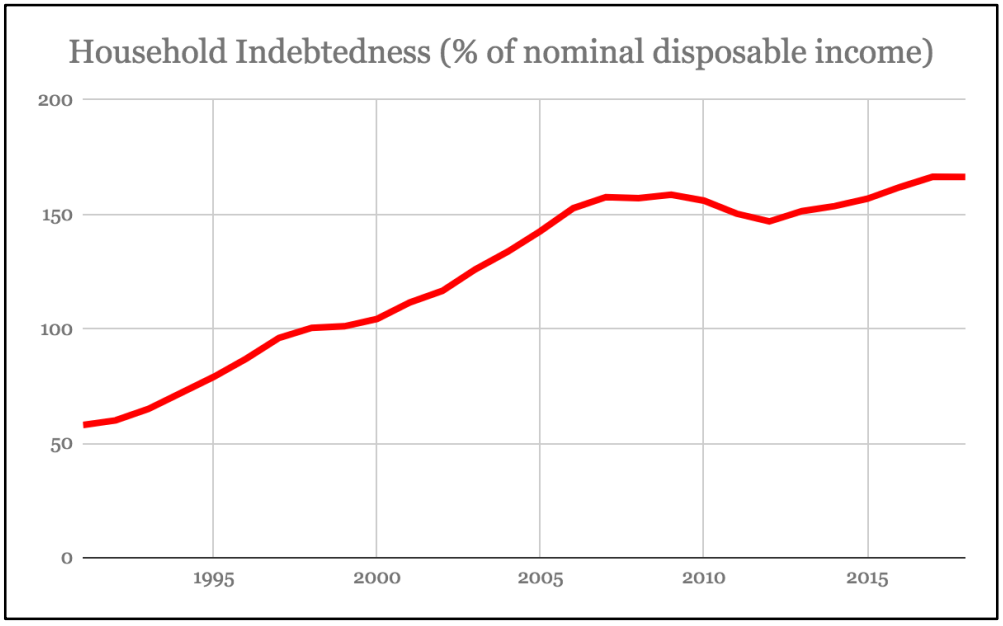
	New Zealand 1980s	New Zealand 1990s	Australia 1990s	OECD 1990s
Real GDP Growth (AAPC) [1]	1.9	2.4	3.5	2.6
Standard Deviation (quarterly)	1.3	1.0	0.7	
Per capita GDP Growth (AAPC)	1.3	1.2	2.3	
Standard deviation (quarterly)	1.3	1.0		
CPI Inflation	11.4	1.7	2.3	5.0
Standard deviation(quarterly)	1.6	0.5	0.6	
Unemployment Rate	4.3	7.9	8.9	7.0
Employment growth				0.9
Current account balance (% GDP)	-2.9	-4.5	-4.4	-0.2
Government operating balance (%GDP)	-1.8	0.5	-2.5	-3.0
10 year interest rates [2]	15.2	8.1		
NZ 10 year rate less US	6.4	1.5		

1. Production based GDP. Geometric average of December year annual average percent changes
2. Data starts from 85Q1

Source: Statistics New Zealand, Gruen and Stevens (), OECD 2000, outlook 68) and The Treasury

Source: Kirkham & Little (RBNZ), "New Zealand's macroeconomic performance in the 1990s: trends and policy debates", p. 2

Figure 1.7



Source: Reserve Bank of New Zealand

Figure 2.1 (Accelerationist Phillips Curve)

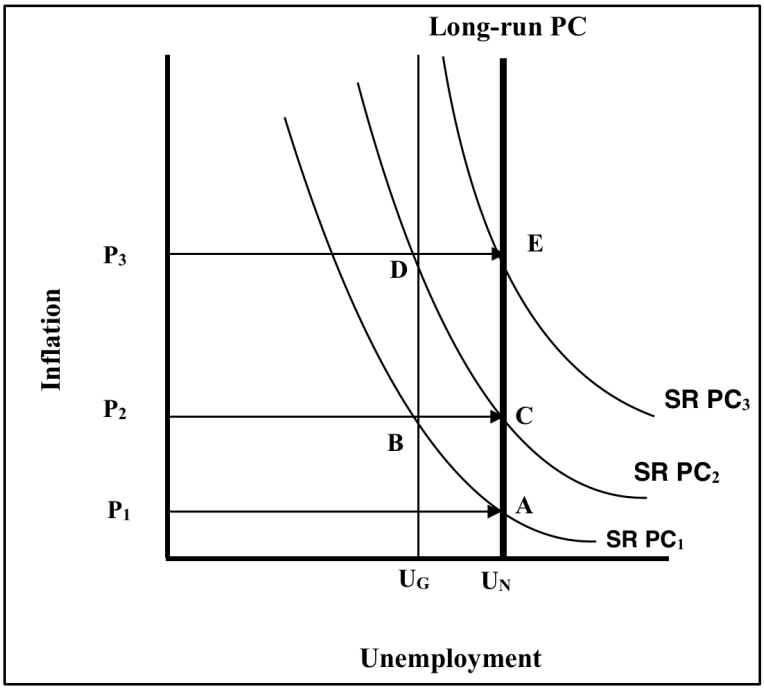


Figure 2.2 (Beveridge Curve)

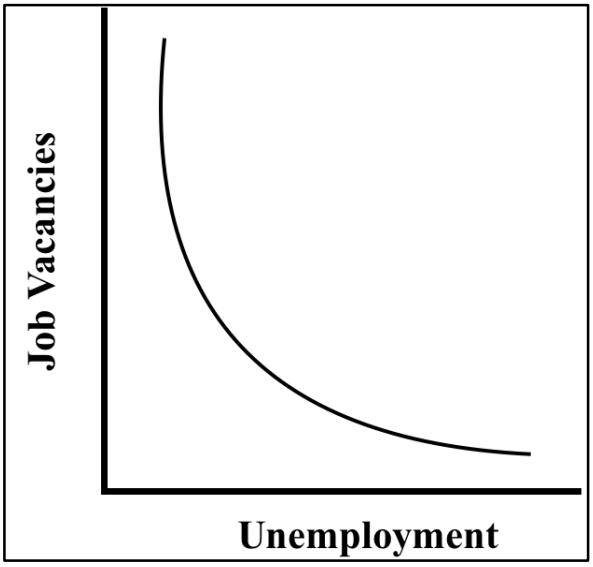


Figure 2.3 (Model of Effective Demand)

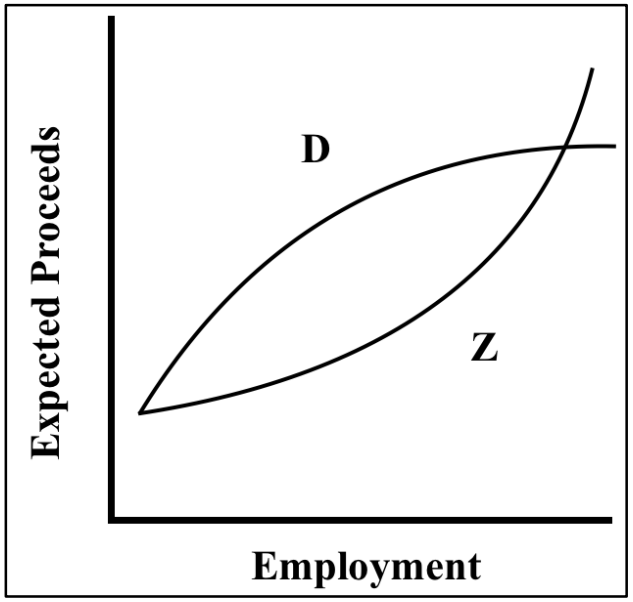
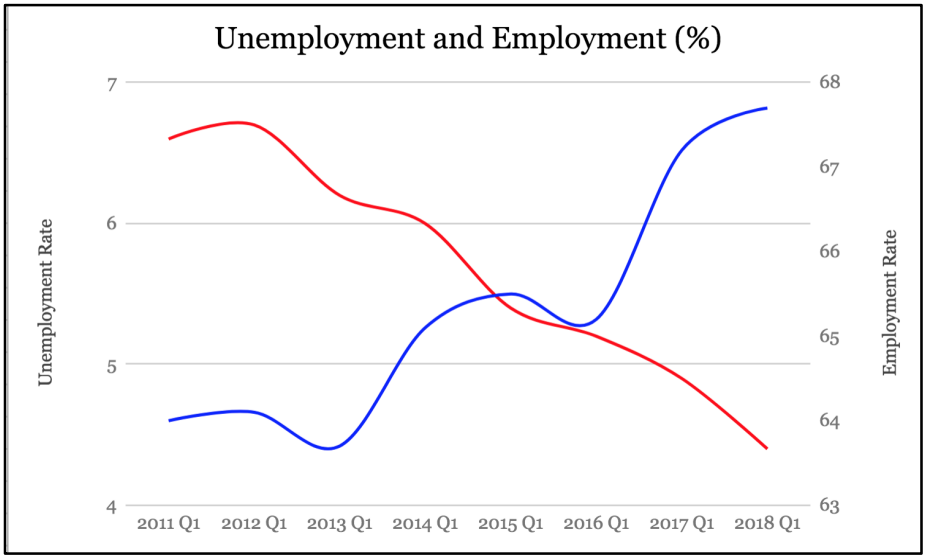
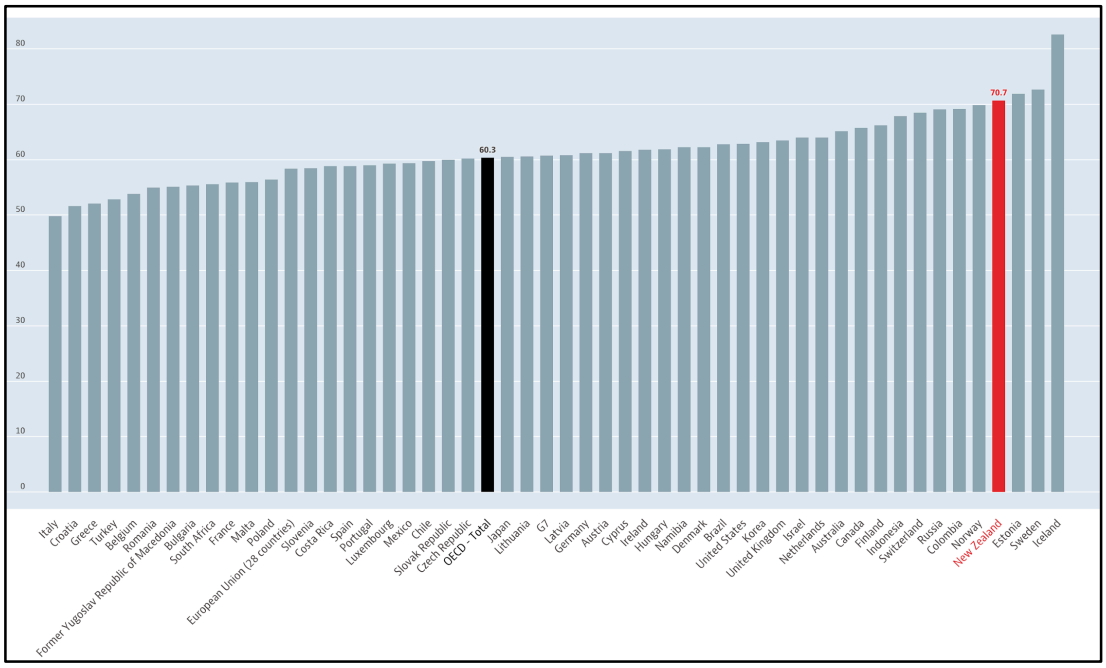


Figure 3.1



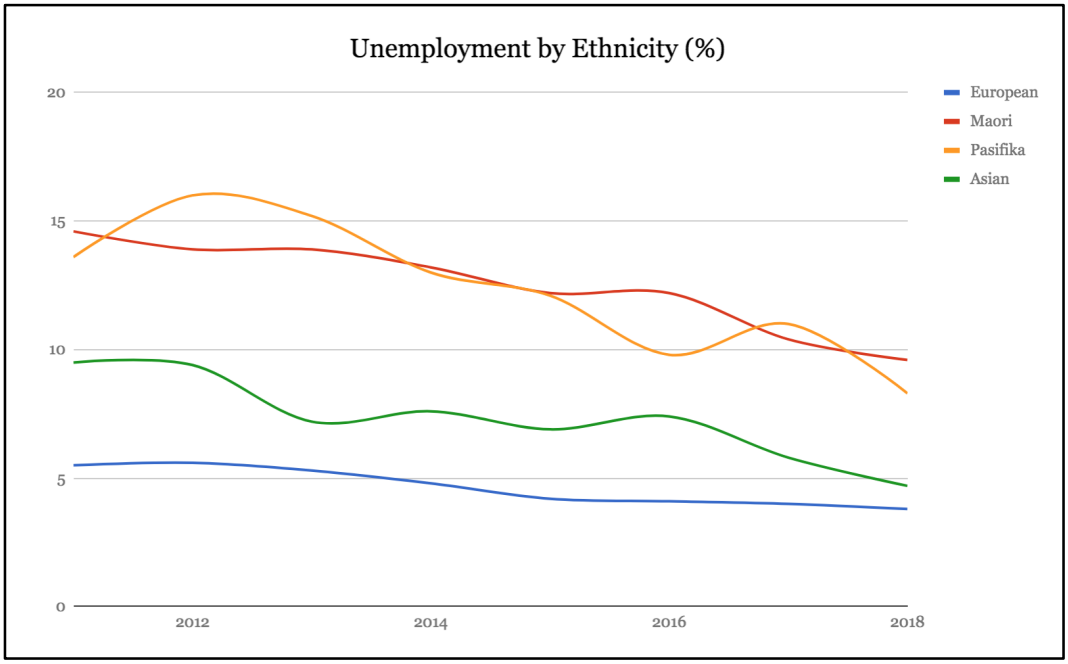
Source: Statistics NZ

Figure 3.2



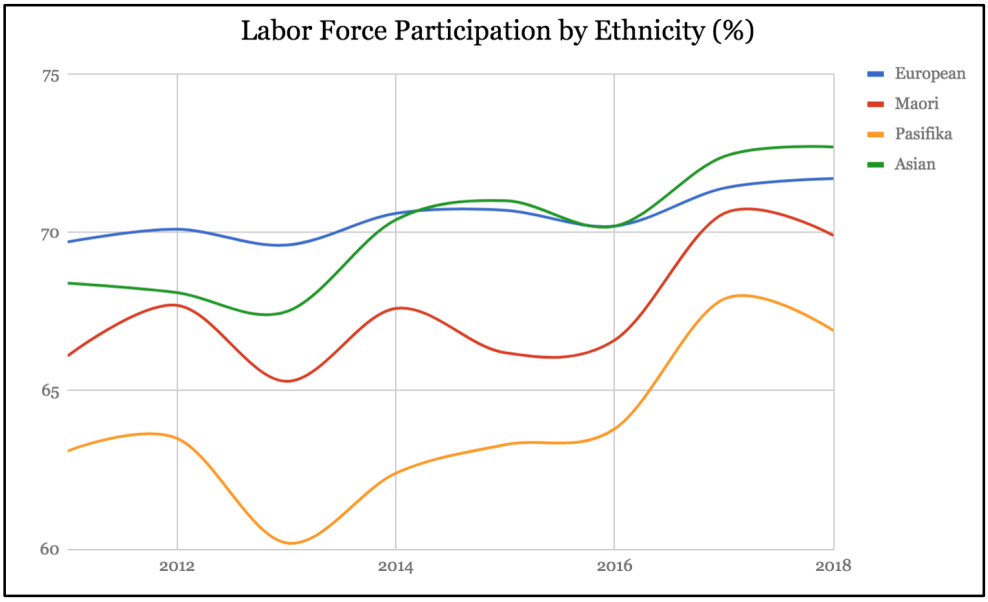
Source: OECD

Figure 3.3



Source: Statistics NZ

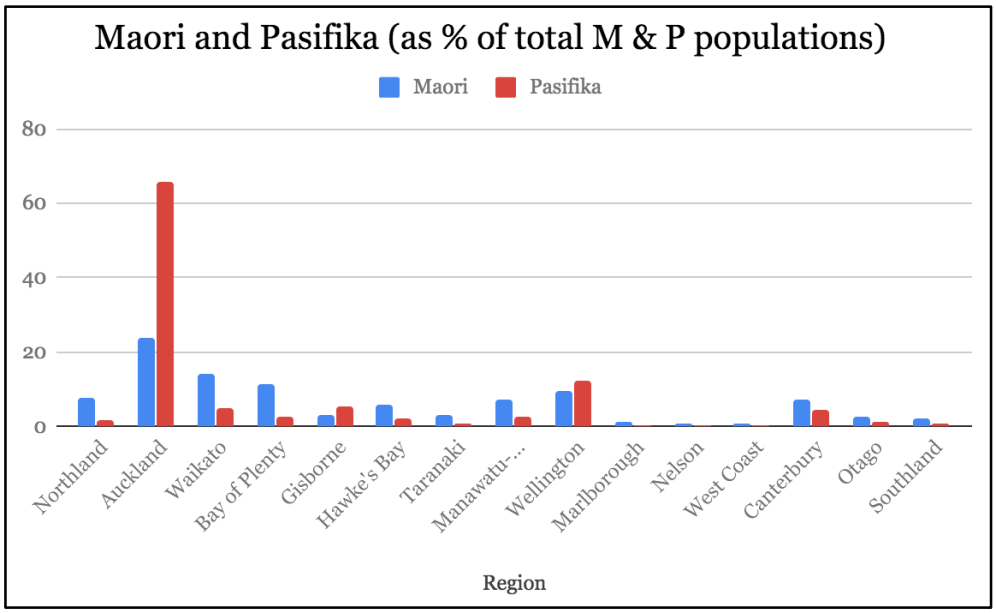
Figure 3.4



Source: Statistics NZ

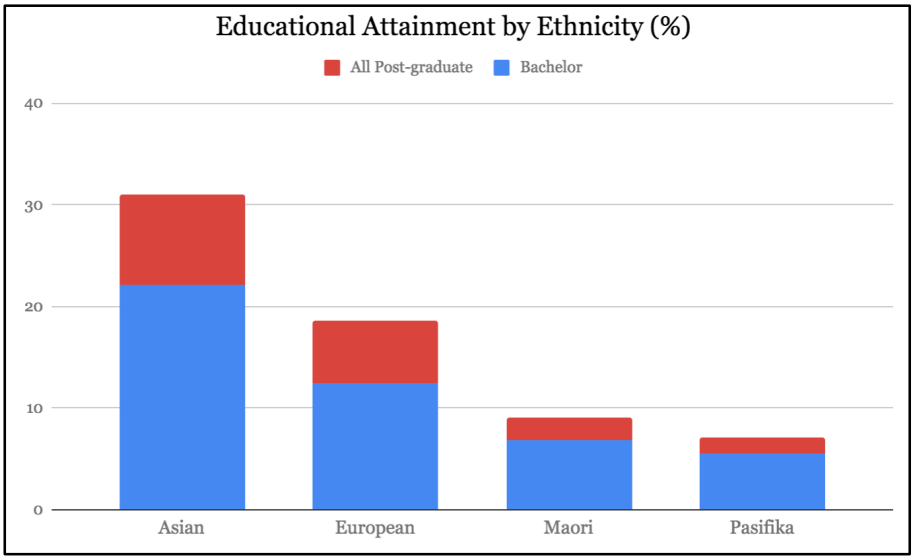
Figure 3.5 - in text

Figure 3.6



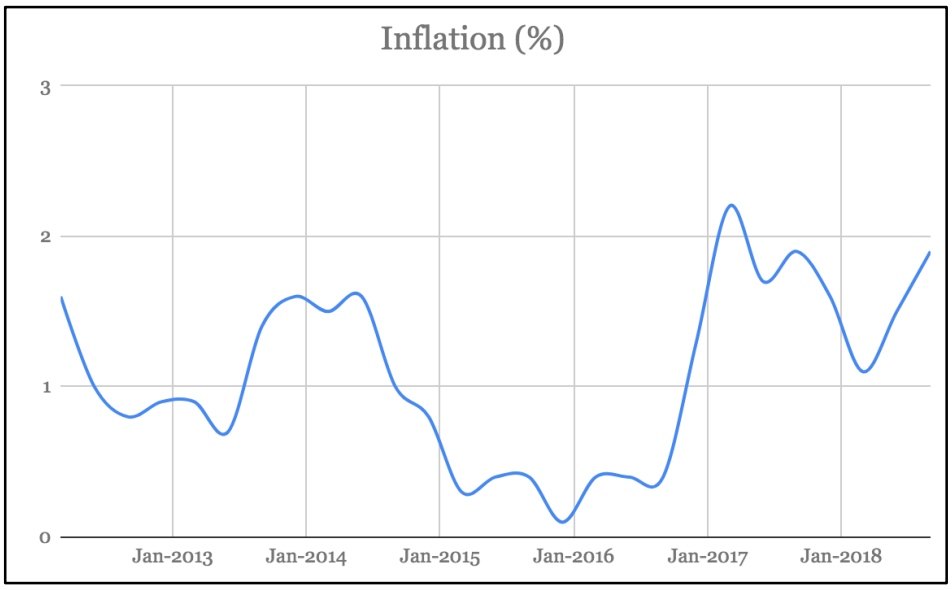
Source: Statistics NZ

Figure 3.7



Source: Statistics NZ

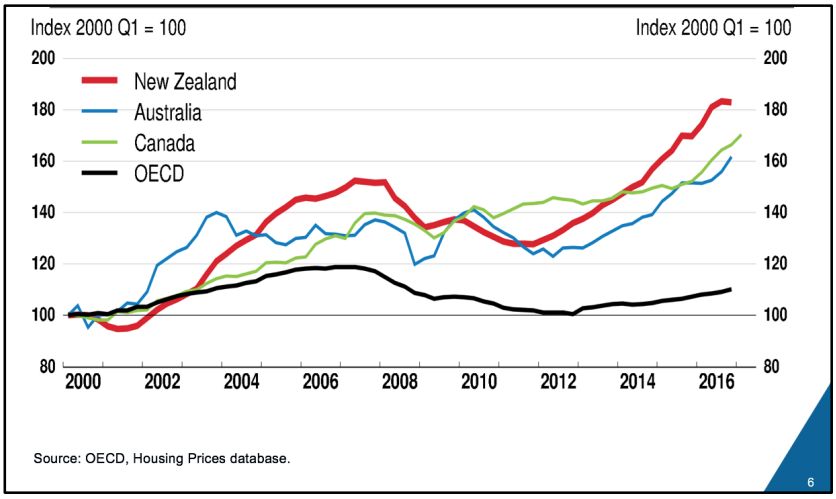
Figure 3.8



Source: Reserve Bank of New Zealand

Figure 3.9 (in text)

Figure 3.10 (House prices relative to income)



Source: OECD

Figure 3.11 (in text)

Figure 3.12 (in text)