



National Certificate of Educational Achievement  
TAUMATA MĀTAURANGA Ā-MOTU KUA TAEA

## **Exemplar for Internal Achievement Standard**

### **Economics Level 2**

This exemplar supports assessment against:

**Achievement Standard 91228**

Analyse a contemporary economic issue of special interest using economic concepts and models

An annotated exemplar is an extract of student evidence, with a commentary, to explain key aspects of the standard. It assists teachers to make assessment judgements at the grade boundaries.

New Zealand Qualifications Authority

To support internal assessment

	Grade Boundary: Low Excellence
1.	<p>For Excellence, the student needs to analyse comprehensively a contemporary economic issue of special interest, using economic concepts and models.</p> <p>This involves:</p> <ul style="list-style-type: none"> <li>• comparing and/or contrasting the impact of different causes on the contemporary economic issue</li> <li>• comparing and/or contrasting the impact of changes in the issue on various groups of New Zealand (NZ) society.</li> <li>• integrating changes shown on economic models into detailed explanations.</li> </ul> <p>The student has comprehensively analysed the economic issue of New Zealand's operating balance deficit. A detailed explanation is provided for the causes for the deficit. The student has used economic concepts, and integrated changes shown on the AS/AD model and Circular Flow model into the explanation (1).</p> <p>The causes for the deficit have been compared and contrasted in a 'greater than/less than' sense in the analysis, integrating the language of the Circular Flow model (2).</p> <p>The student has explained, in detail, the impacts on various groups of NZ society of changes made to reduce the operating balance deficit. Economic concepts and secondary sources of information have been used to support the explanation (3).</p> <p>The student has compared and contrasted the impact of changes in a 'greater than/less than' sense in the analysis (4).</p> <p>For a more secure Excellence, the student could also integrate the Circular Flow model into the explanation of the impact of changes on various groups in NZ society.</p>

## Analysing New Zealand's Operating Balance Deficit

Since 2009, the NZ government's operating budget has been in deficit. The level of deficit has grown in each of the last three years and in 2011 reached \$10.5 billion. Legislation (The Public Finance Amendment Act) requires the NZ government to adopt the principles of responsible fiscal management. Because of this, the NZ government is legally required to return the NZ operating balance back to surplus. The NZ government has signalled its intention to achieve a surplus by the end of the 2014/15 financial year. The operating balance deficit has mainly been caused by four major events between 2008 and 2010. These contributing factors are the NZ recession in 2008; underlying policies and issues in 2008; the Global Financial Crisis and global recession; and the 2010 Christchurch earthquake.

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*[Student explained in detail these causes using economic concepts and integrated changes shown on an AS/AD model and Circular Flow model]*

### Major Cause

The major cause of the operating balance deficit in NZ is the impacts of the global recession. Each of the four events affected the operating balance in NZ negatively; the Christchurch earthquake increased government expenditure due to increased (Tr) and (G) and reduced revenue. The government will have to cover about \$5 billion of the combined \$20b cost, and emergency assistance for businesses and workers hardest hit by the earthquake will cost between \$100 million and \$120 million. However, this did not affect NZ as much because just Christchurch lost employment and population, not all the rest of NZ.

2

Policies already in place in 2008 affected the operating balance by increasing expenditure on paying for schemes like Kiwisaver subsidies, Working for Families and 20 hours free early childhood education, but this increase in expenditure was not significant compared to the impacts of the global recession.

The existing recession in NZ in 2008 meant government expenditure increased to pay for increased (Tr) because employment fell and "tax revenue is expected to be \$3,148 million lower in aggregate over the next four years". When the Global Financial Crisis hit and led to the global recession it affected all sectors of the NZ economy, government revenue fell from \$56.7b in 2008 to \$54.6b in 2009, a 3.7% decrease in revenue in just one year.

### Comparing how different groups in New Zealand have been affected by the government's policy changes to eliminate the operating balance deficit by 2014/15

The Government plan to achieve an Operating balance surplus by 2014-15 with a thin surplus of \$197 million. The Government is faced with the problem of scarcity, there is limited resources like tax revenue to fund necessary expenditure, and therefore they have to make economic decisions that will create an opportunity cost. The Government made the economic decision to make major budget cuts and increase taxes. They are reducing the operating balance deficit by increasing the tax on tobacco, freezing the funds on childhood care subsidies, becoming stricter on student loans and deferring the auto-enrolment of employees to Kiwisaver, childcare/housekeeper, income under \$9,880 and the children's income credit funds will be frozen.

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To reduce the deficit Government has decided to increase taxes on tobacco "The hardest hit from yesterday's announcements will be smokers, who will be paying \$20.50 for a pack of 20 cigarettes within four years because of a progressive rise in tobacco excise – part of \$1.4 billion forecast in new revenue." With the cost of tobacco rising the group that will be majorly affected by this rise in tax will be households that are on low incomes and smoke "Users of loose tobacco tend to be younger, of lower socio-economic status and be Maori or Pacific peoples. These groups are the most sensitive to price increases of tobacco products, hence their greater use of loose tobacco. This is especially evident among young people: 61% of smokers aged 15-19 years report smoking roll-your-owns." This tax means that the lower income earners will be the most affected by this tax increase.

To return to an operating balance surplus government will freeze the funds on early childhood subsidies "Parents of pre-schoolers could be facing higher fees for childcare because of a freezing of government subsidies, which are usually adjusted for inflation." "Unless a childcare centre absorbs all the cost rises, they will be passed on to parents." This means that parents of young children will have to pay more now for childcare fees, this will impact on the households with middle and low incomes, the increased cost will mean

3

that households with young children will now have less disposable income. This is the opportunity cost of freezing the funds on childhood care subsidies.

Early childhood care used to be a large cost for the Government, Ms Parata said, "recent research had shown the current rates more than meet the average cost of delivering high-quality ECE. Government subsidies for ECE had already doubled from \$617 million in 2006/07 to \$1.3 billion this year." The cost of early childcare increasing will have a large financial impact on families reliant on two incomes to survive.

The Government is also raising the price of prescriptions "Prescription charges rise from \$3 to \$5 per item" this is because the Government will now receive more revenue from tax on prescriptions. "Prescription charges rise from \$3 to \$5 per item with a cap of 20 items, raising \$20m in first year and \$40m in subsequent years." Additionally, the Government has raised GST; they raised it from 12.5% to 15%, meaning consumers pay more for goods and services. The middle and low-income earners will be the most affected by this because when they go to purchase goods they will now have to spend more to buy the same goods or reduce their spending. This type of tax is a regressive tax and takes proportionally more of low and middle-income wage and salary earners disposable income, but with the rise in GST, the Government will receive more revenue.

The Government budget has stated that to cut down costs so it can return to an operating balance surplus it will be deferring the auto-enrolment of employees to Kiwisaver. One of the main ways the Government was able to keep to its surplus deadline was by delaying the automatic enrolment of employees into Kiwisaver, which would have meant automatic Government payments.

With the automatic enrolment to Kiwisaver being cut back it meant that people who start a career won't get the start-up fund of \$1000, and it may be harder for new employees to start saving for retirement, as they have to enrol themselves voluntarily. This is the opportunity cost for individuals of the government not going ahead with auto-enrolment into Kiwisaver, and the loss of potential savings that could have been invested with NZ businesses and banks by the fund managers, and the foregone tax on investment income, is the opportunity cost for the government and the economy.

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The Kiwisaver scheme was deferred because "the plan was expensive not only because of the member tax credits, the 50c the Government contributed for every dollar from the saver, but also because of the \$1000 kick start for each saver who joined." If Kiwisaver was kept going "auto-enrolment was expected to cost \$514 million over four years but most of that would fall in the first year." To try to get back to a surplus in his budget speech Mr English said, "auto-enrolment is now not possible without putting the updated forecast surplus at risk". They will also get tougher on student loans "student loans are to be paid back more quickly, and they will freeze the parental income threshold for allowances for four years, and Masters and PhD students no longer have access to allowances, saving about \$60m to \$70m a year."

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## Conclusion

Graduate students who find a full-time job will face reduced disposable income as more of their income is taken by the IRD to repay their student loans. They face reduced retirement savings, because they will have to join the Kiwisaver scheme voluntarily when they start work, to receive the \$1000 kick-start and tax credit from IRD and any time delay affects the amount of future retirement savings. The groups who will be most affected by these changes are the low to middle-income wage and salary earners who now have to pay more for goods and services because of the increase in GST, and also face higher prescription charges and increased childcare costs and no tax rebates. Therefore, overall the changes are having a greater impact on groups who already have the least amount of money to spare, and are carrying most of the burden of the cost cutting measures and tax increases by the Government.

	Grade Boundary: High Merit
2.	<p>For Merit, the student needs to analyse in depth a contemporary economic issue of special interest, using economic concepts and models.</p> <p>This involves:</p> <ul style="list-style-type: none"> <li>• providing a detailed explanation of causes of the contemporary economic issue using economic models</li> <li>• providing a detailed explanation of the impacts of the contemporary economic issue on various groups in New Zealand society.</li> </ul> <p>The student has analysed, in depth, the economic issue of New Zealand's operating balance deficit. The student has explained the causes of the deficit in detail, using economic concepts, and integrating changes shown on the AS/AD model and Circular Flow model into the explanation (5).</p> <p>The student's conclusion has compared and contrasted the causes in a 'greater than/less than' sense, using secondary sources of information (6).</p> <p>The student has explained, in detail, how the impacts of changes made to reduce the operating balance deficit affected various groups of NZ society. The explanation used economic concepts, and integrated changes shown on the Labour Market model (7).</p> <p>To reach Excellence, the student's work would become comprehensive with further comparison, explaining why the impacts of changes made to reduce the operating balance deficit would affect some groups more or less than other groups.</p> <p>For example, people affected by changes to tax policies are impacted less than those who have lost their jobs due to mergers of government agencies. Their income reduces to the unemployment benefit if they cannot find another job quickly, resulting in reduced household consumption and increased financial hardship, and reduced PAYE and GST tax revenue for the government (opportunity cost).</p>

## Analysing New Zealand's Operating Balance Deficit

In 2009 the core Crown expenses of the NZ government began to overtake the core Crown tax revenue, thus from 2009 and onwards an operating balance deficit began to grow. The deficit in NZ was caused by the 2008 recession, existing policies and issues, the global financial crisis, and the 2010 Christchurch earthquake.

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[Student explained in detail these causes using economic concepts and integrated changes shown on an AS/AD model and Circular Flow model]

### Conclusion

The most significant factor contributing to the operating balance deficit was the 2008 global financial crisis and subsequent global recession. From 2008 to 2009, there were major drops in NZ's GDP, which were caused by the existing 2008 NZ recession and the global financial crisis. From the 2008 March quarter to the 2009 March quarter there has been a drop in NZ's GDP of 2.4%. The recession caused many people to be unemployed or incomes of employees were decreased. Ultimately, the recession caused the taxation revenue of the government to decrease from \$56,747 to \$54,681 million dollars. There was a \$2,066 million dollar decrease from 2008 to 2009. Government expenditure in NZ rose 10.5% from 2008 and 2009, as total spending in 2008 was \$75,842 million dollars and went up to \$83,821 million dollars in 2009. Thus, government expenditure rose \$7,979 million dollars or 10.5%.

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The Christchurch earthquake was another factor that caused the build-up of the NZ governments operating balance deficit, which occurred in September 2010, but it did not contribute as much as the recession did. According to Statistics NZ, the Government increased expenditure by 6.6%, year ending in 2011 March quarter. GDP during 2010 to 2011 decreased much less compared to 2008 and 2009 when NZ was in a recession. GDP decreased by only 0.2% in the September 2010 quarter because of the Canterbury earthquake, therefore the recession that affected NZ during 2008-2009 was a much more significant cause to the government's balance deficit as it caused NZ's economic situation to be significantly slower than compared with the Christchurch earthquake.

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### Return to Fiscal Surplus Policies

To eliminate this balance deficit the NZ government has made the goal to return to fiscal surplus by 2014/15. The Government is faced with the problem of scarcity, there is limited resources like tax revenue to fund necessary expenditure, and therefore they have to make economic decisions that will create an opportunity cost. The government has made many changes and new policies, which involve spending more on priority projects and decreasing its spending on other sectors. The government has spent more in NZ's public service sector. By increasing spending on the public services the NZ government has created 2,800 more jobs in the public health sector, 900 more police officers and 1,600 more teachers. The opportunity cost of this decision is other agencies face reduced funding and job losses, because there is limited tax revenue.

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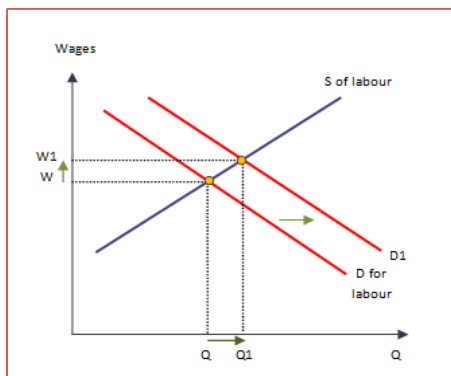
To save money the government has merged several agencies to lessen job spaces. These mergers are expected to save \$115 million dollars over a five-year period. Some agencies merged were the Ministry of Agriculture and Forestry, the Food Safety Authority, and the Ministry of Fisheries; this is expected to save \$48 million dollars.

Government agencies in the health and charitable sectors have also faced changes and cuts to funding to save \$20 million dollars. Jobs have also been lost due to the government's budget cuts such as 220 jobs in Kiwirail. The job losses is the opportunity cost to the government of deciding to merge these agencies, because they will have to pay more in transfer payments like the unemployment benefit.

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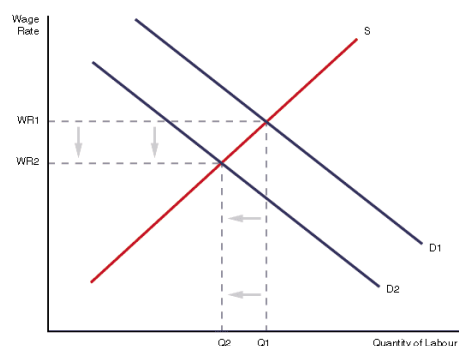
The government has also made new policies concerning its taxes, such as tobacco, which will increase in tax 10% each year for four years. Tax credits are being removed as well to increase savings, such as childcare, housekeeper, income under \$9,880 and the children's income credit. These will save the government \$117 million over 4 years. The government has also tightened its tax regulations on holiday baches, boats and planes.

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Due to the policy changes made since several groups of people in NZ have been affected. Because of increased government spending in the public service sector all teachers, nurses, doctors and law enforcements have benefited positively. They are receiving more funding and any unemployed who are specialised in these services will be able to enter these sectors more easily. Because there is an increase in the demand for labour in these sectors as shown on the model (D-D1) and the quantity of labour employed increases from Q to Q1 and the wage rate increases from W to W1 in these sectors.

However, not all people in NZ benefited from the return to fiscal surplus policies. Since many agencies have been merged, the number of jobs in the merged sectors has decreased, causing some people more difficulty in finding work because they were specialised in these jobs and so it is harder for them to be re-employed in other sectors or industries.



There is decreased demand for their labour skills and this is shown on the model as the DL curve shifting left from D1 to D2, thus causing employment to reduce from Q1 to Q2 and a drop in the wage rate from WR1 to WR2 in these sectors.

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The opportunity cost to the government of this economic decision is they may remain on the unemployment benefit for longer and need to be retrained, taking courses that need to be funded from tax revenue.

Smokers and producers of tobacco are affected due to the new taxes and regulations enforced by the government, because now the tax on tobacco will increase by 10% each year for four years, and smokers in NZ will suffer due to the increase in price.

Producers are affected by the regulations that may decrease sales, e.g. bans on advertising and having to use plain packaging with a large health warning all over it and they have to be locked away from public view. Tax credits are also being removed to increase savings so people associated with childcare, housekeeper, income under \$9,880 and the children's income credit will suffer.

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## Conclusion

Since the increase of government spending in NZ's public service sector, students and teachers have benefited, and people associated with the health sector have benefited. People who are specialised in these sectors benefited as more job vacancies opened up.

Certain groups have been affected by the new tax policies, for example smokers who now have to pay more for cigarettes and tobacco. Additionally, the changes to tax regulations around holiday baches, planes and boats and tax credits being removed have affected other groups.

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	Grade Boundary: Low Merit
3.	<p>For Merit, the student needs to analyse in depth a contemporary economic issue of special interest, using economic concepts and models.</p> <p>This involves:</p> <ul style="list-style-type: none"> <li>• providing a detailed explanation of causes of the contemporary economic issue using economic models</li> <li>• providing a detailed explanation of the impacts of the contemporary economic issue on various groups in New Zealand society.</li> </ul> <p>The student has provided an in-depth analysis of the economic issue of New Zealand's income and wealth distribution. The economic concepts related to the contemporary economic issue have been defined, and the student has used examples (8).</p> <p>Causes of income and wealth inequality are explained in detail, using quoted and paraphrased statistical information, economic concepts, and the Lorenz Curve and Equity/Efficiency Trade-off models (9).</p> <p>The student has explained in detail the impacts of the government redistribution and education policies on various groups of NZ society, and the effect of these policies on income and wealth inequality (10).</p> <p>For a more secure Merit, the student could use the Equity/Efficiency Trade-off model and equity concept to support the explanation.</p> <p>For example, the student could note that the change shown in the model improves vertical equity, however, there is a loss in efficiency (9). As an economy becomes more equitable (fairer), people receive closer to the same disposable incomes because some are paying larger amounts in tax, and this reduces consumption spending, which affects businesses and employment.</p>



## Analysing New Zealand's Income and Wealth Distribution

**Inequality** means the unequal distribution of income, wealth, goods, and services.

**Inequity** means the opposite of equity, the idea of fairness. It is a non-measurable concept (some people may think a situation is fair and others do not) so it is often a matter of opinion.

**Differences in equity:**

**Horizontal equity** looks at treating people in the same situation the same way, **for example**, all children in New Zealand (NZ) are able to receive a free education – this service is provided to them all.

**Vertical equity** looks at what is fair to people in different situations. People are treated according to their individual circumstances. **For example**, middle and high-income households pay more tax than low-income households do. They may consider this unfair because they are hardworking and have to pay more tax than people who they consider are lazy or made bad decisions.

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### Three causes of Income and Wealth Inequality

- Wage Inequality
- Educational Outcomes
- Increasing housing costs

In 2010 the average pay for CEOs was \$1.39 million and this increased by 3.3% to \$1.44 million in 2011. The average for their employees, estimated by dividing the total pay bill by the number of staff was \$63,960, up just 0.8% on the previous year. **The CEOs get 22.5 times the pay of the average workers so this highlights why wage inequality will cause income to be distributed unequally and the gap between these groups will continue to grow each year if the CEOs receive larger wage percentage increases than other groups of workers.**

9

**Another related cause of wage inequality and therefore income inequality is educational outcomes.**

In 2011 New Zealanders with a bachelor's degree or higher earned, on average, 29% more than those with only upper secondary or post-secondary non-tertiary qualifications. In 2011, **the average median hourly wage for those with tertiary degrees was \$27.81, approximately 1.6 times higher compared to people with just high school qualifications. That is a lot more than the adult minimum wage rate of \$14.25 an hour, and therefore it is better to gain a tertiary qualification if you want to receive more income and lessen your chances of being unemployed. Groups of people with little or no formal qualifications are more likely to be unemployed, and unemployed for longer periods than those with tertiary qualifications. There is a growing gap between the incomes received by beneficiaries and superannuates and the income of the working population, so increasing your chances of employment by gaining qualifications is very important.**

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Higher Outgoings to Income (OTI) like **housing costs** have also made income inequality worse, because **low to middle-income households (Q1 and Q2) struggle to pay for necessities like food, clothing, basic household services, transport, medical care and education after housing costs are paid.** In 2013, about 27% of households had housing costs that took more than 30% of their disposable (after tax) income, for the Q1 group of households it was 42% and for the Q2 group it was 36%.

In the **late 1980s, 5% of households had a high OTI, greater than 40%**, but this percentage grew between the mid-1990s and 2013 to around 13 to 15% of households. In June 2013, almost all renters receiving the Accommodation Supplement (93%) spent more than 30% of their income on housing costs and 3 out of 4 spent more than 40%, and nearly half of them spent more than 50% of their disposable income on rent. In **2007, 33% of people entitled to the Accommodation Supplement were receiving the maximum payment, but this increased to 50% in 2013.**

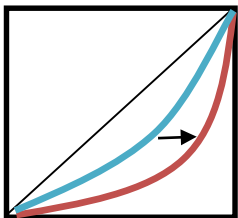
2014 Household Incomes Report – Key Findings.

<https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/monitoring/household-incomes/>

**The Lorenz Curve Model can show the extent of the inequality of income and wealth in an economy, the vertical axis shows the cumulative percentage of national income or wealth, and the horizontal axis shows the cumulative percentage of households. The further the Lorenz Curve is away from the line of absolute equality the more unequal the distribution of income or wealth. The red line shown in the model shifts right reflecting growing income inequality in NZ, the gap between the rich and poor has widened over the last two decades, and more households are becoming asset poor.**

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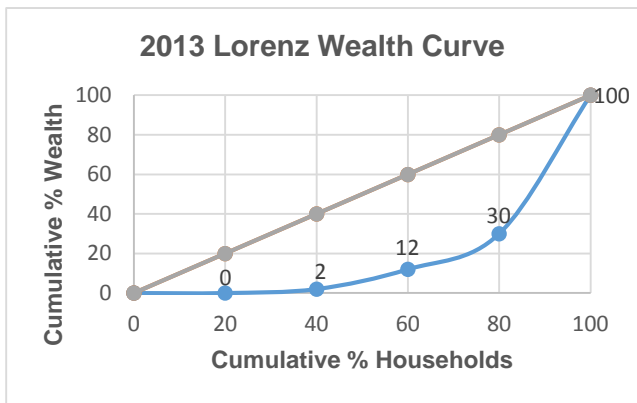
**Lorenz Income Curves**



"In 2009, the equivalised disposable income of a household at the 80th percentile was 2.5 times larger than that of a household at the 20th percentile. This was about the same as the ratio in 2007. In 1988, the ratio was 2.2. Income inequality rose steeply between 1988 and 1991, briefly plateaued, and then rose steadily from 1994 to 2004. Most of the observed increase in income inequality between 1988 and 2004 was due to a larger overall rise in incomes for those in the top 20 percent of incomes – around a quarter once adjustments for inflation are made. In that period, incomes for those in the bottom 20 percent of incomes decreased a little. Incomes for the middle 60 percent climbed more overall for those closer to the top 20 percent than for those closer to the bottom 20 percent."

<http://socialreport.msd.govt.nz/economic-standard-living/income-inequality.html>

Using the Gini measure for NZ, shows us that the top 10% of households receive 25% of the national income,



and the top 1% in New Zealand received about 8% of all taxable income in 2010 and 2011. Wealth inequality is about double income inequality, so the top 10% own about 50% of all household wealth.

2014 Household Incomes Report – Key Findings.

<https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/monitoring/household-incomes/>

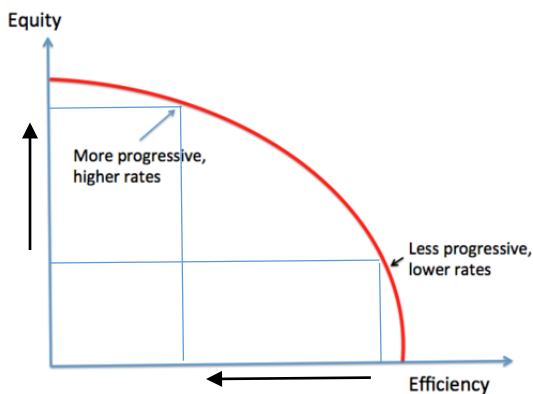
The NZ wealth distribution shown on my Lorenz Curve Model is based on the figures from an online article by Rob Stock, taken from Statistics NZ saying that the top 20% quintile (Q5) owned 70% of the wealth. The second

highest quintile (Q4) owned 18%, and the middle quintile (Q3) owned 10%, the lower quintile (Q2) owns 2% and the lowest 20% (Q1) of households owned

nothing. <http://www.stuff.co.nz/business/money/10416461/Wealth-split-worse-than-most-realise>

The causes above also help explain the link between income and wealth, because when a consumer earns enough income they can save their surplus income and invest in income-generating financial assets like term deposits, shares, gold and rental property. This highlights the gap between people who are able to create wealth and those who have to spend all their limited income or choose to spend it all. This link helps explain

way the income and wealth gap is widening between the richest and poorest quintiles. The people in a position to generate long-term wealth expand their future consumption possibilities by increasing their income through income-generating assets. It also creates more investment from increased savings and economic growth as people with more discretionary income demand more goods and services, increasing the demand for labour and creating more jobs. There is an incentive to work harder and earn more income to develop wealth and achieve a more comfortable lifestyle.



A progressive tax system with high marginal tax rates for top and middle income earners can act as a disincentive for taking job promotions for example, the extra tax you pay may mean that you are not much better off for working harder or taking on more responsibility.

However, there is a need for balance so we do not see real poverty develop in NZ. The government has improved income inequality since 2004 through redistribution policies like Working for Families Tax Credits, and the Accommodation Supplement for low to middle-income households and interest-free student loans to encourage New Zealanders to get a tertiary qualification and improve their earning potential.

[Student also explained in detail the impacts of the government redistribution and education policies on various groups of NZ society and the effect of these policies on income and wealth inequality.]

	Grade Boundary: High Achieved
4.	<p>For Achieved, the student needs to analyse a contemporary economic issue of special interest, using economic concepts and models.</p> <p>This involves:</p> <ul style="list-style-type: none"> <li>• identifying, defining or describing concepts related to the contemporary economic issue</li> <li>• providing an explanation of causes of the contemporary economic issue using economic models</li> <li>• providing an explanation of the impacts of the contemporary economic issue on various groups in NZ society.</li> </ul> <p>This student has defined the economic concepts related to the contemporary economic issue of New Zealand's income and wealth distribution, and used examples (11).</p> <p>Causes of income and wealth inequality are explained, using quoted and paraphrased statistical information, economic concepts, a Lorenz Wealth Curve and a Consumption Possibility Curve (12).</p> <p>The student has explained the impacts of government redistribution and education policies on various groups of NZ society, and the effect of these policies on income and wealth inequality (13).</p> <p>To reach Merit, the student could use the statistical data and Lorenz Curve model to illustrate and explain in detail whether income inequality has increased or decreased over the past decade or two.</p>

## Analysing New Zealand's Income and Wealth Distribution

**Inequality** means the unequal distribution of income, wealth, goods, and services.

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**Differences in equity:**

**Horizontal equity** looks at treating people in the same situation the same way, **for example**, all children in New Zealand (NZ) are able to receive a free education – this service is provided to them all.

**Vertical equity** looks at what is fair to people in different situations. People are treated according to their individual circumstances. **For example**, middle and high-income households pay more tax than low-income households do. They may consider this unfair because they are hardworking and have to pay more tax than people who they consider are lazy or made bad decisions.

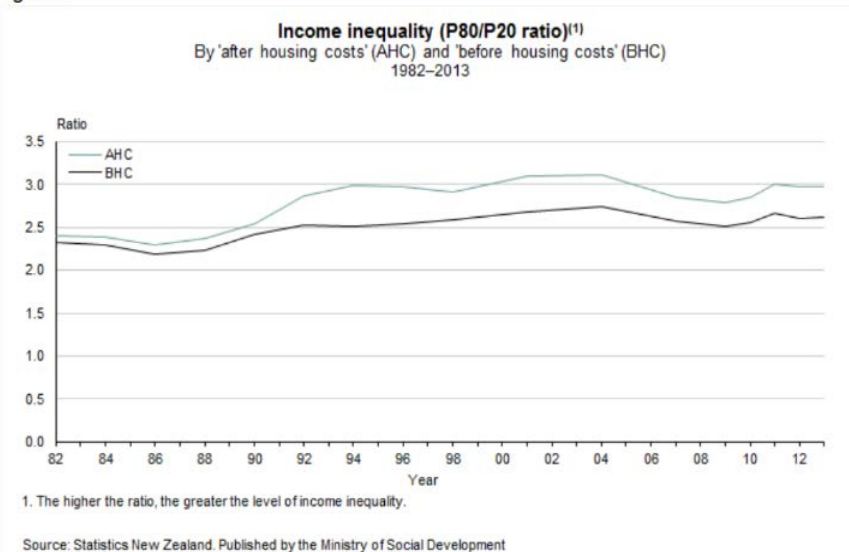
### Three causes of income and wealth Inequality

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- Educational Outcomes
- Increasing housing costs

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**continue to grow each year if the CEOs receive larger wage percentage increases than other groups of workers.**

Figure 1



**Another related cause of wage inequality and therefore income inequality is educational outcomes.**

In 2011 New Zealanders with a bachelor's degree or higher earned, on average, 29% more than those with only upper secondary or post-secondary non-tertiary qualifications.

**In 2011, the average median hourly wage for those with tertiary degrees was \$27.81, approximately 1.6 times higher than those with only high school qualifications. That is a lot**

**more than the adult minimum wage rate of \$14.25 an hour, and therefore it is better to gain a tertiary qualification if you want to receive more income and lessen your chances of being unemployed.**

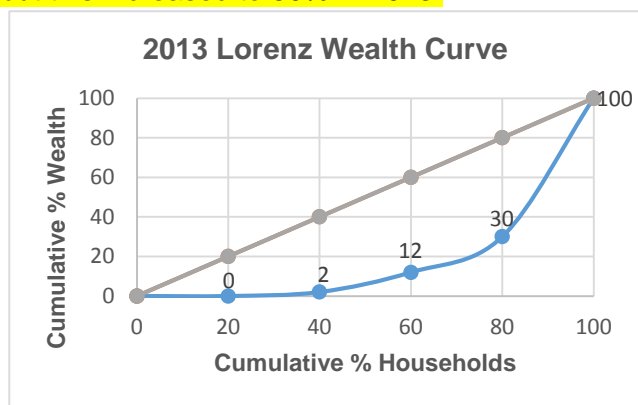
Groups of people with little or no formal qualifications are more likely to be unemployed, and **unemployed for longer periods than those with tertiary qualifications.** There is a **growing gap between the incomes received by beneficiaries and superannuates and the income of the working population, so increasing your chances of employment by gaining qualifications is very important.**

Higher outgoings to income e.g. **housing costs have also made income inequality worse, because low to middle-income households struggle to pay for necessities like food, clothing, basic household services, transport, medical care and education after housing costs are paid.**

**In 2013, about 27% of households had housing costs that took more than 30% of their disposable (after tax) income, for the lowest income group of households it was 42% and for the second lowest group it was 36%.**

In June 2013, almost all renters receiving the Accommodation Supplement (93%) spent more than 30% of their income on housing costs and 3 out of 4 spent more than 40% and nearly half of them spent more than 50% of their disposable income on rent.

In 2007, 33% of people entitled to the Accommodation Supplement were receiving the maximum payment, but this increased to 50% in 2013.



The NZ wealth distribution shown on my Lorenz Curve Model created using Excel shows that the top 20% of households own 70% of the wealth. The second highest group own 18% of the wealth, and the middle group own 10%. The lower group of households owns 2% and the lowest 20% of households own nothing.

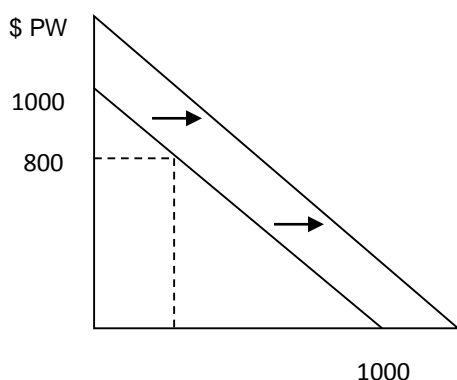
12

### Consumption Possibility Curve

The consumption possibility curve shows the link between income and wealth, because when a consumer earns enough income they can choose to save their

surplus income, shown as the consumer who is able to save \$200 per week. If this is invested in income-generating assets like a term deposit in the bank it will give you interest and later you may be able to invest

in a rental property, or shares. This means you are developing wealth, but other consumers may be spending all their income on bills and so have no spare income leftover. However, the consumer purchasing income-generating assets means their consumption possibility frontier has moved outwards from the old one.



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This is related to the causes mentioned above because for example, an unemployed person or a household in the two lowest groups do not have much income because of differences in educational outcomes and higher costs of housing, they cannot save any money and poor people spend all their income on bills. Lucky people and those who have inherited wealth can continue using their income to

purchase more assets and so become even wealthier, and operate at the expanded consumption possibility frontier.

The government has worked to improve income inequality since 2004 through redistribution policies like Working for Families Tax Credits, and the Accommodation Supplement for low to middle-income households and interest-free student loans to encourage New Zealanders to get a tertiary qualification.

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[Student also explained the impacts of the government redistribution and education policies on various groups of NZ society and the effect of these policies on income and wealth inequality.]

	Grade Boundary: Low Achieved
5.	<p>For Achieved, the student needs to analyse a contemporary economic issue of special interest, using economic concepts and models.</p> <p>This involves:</p> <ul style="list-style-type: none"> <li>• identifying, defining or describing concepts related to the contemporary economic issue</li> <li>• providing an explanation of causes of the contemporary economic issue using economic models</li> <li>• providing an explanation of the impacts of the contemporary economic issue on various groups in NZ society.</li> </ul> <p>This student has defined the economic concepts related to the contemporary economic issue of child poverty in New Zealand, using relevant economic information (14).</p> <p>The student has explained causes of NZ child poverty, using quoted and paraphrased economic information, economic concepts, and a Lorenz Curve model (15).</p> <p>The student has listed the various impacts on certain groups of NZ society, and explained what effect the charities, political campaigns and new education policies may have on NZ child poverty and inequity (16).</p> <p>For a more secure Achieved, the student could use the Labour Market model to illustrate an increase in the supply of low skilled labour, and the effect of having a minimum wage rate on involuntary unemployment in this labour market (17).</p>

## Analysing New Zealand's Child Poverty

**Inequality** means the unequal distribution of income, wealth, goods, and services.

**Inequity** means the opposite of equity, the idea of fairness.

**Poverty** means people do not have enough money to pay for their basic needs.

14

**Income poverty:** 265,000 children (one in four). This looks at the amount of money families have to pay bills and purchase everyday essentials. This is defined as having less than 60% of median household income, after housing costs are removed.

**Material poverty:** 180,000 children (17%). This means regularly going without things most New Zealanders consider essential – like fruit and vegetables, shoes that fit, and their own bed and a warm house.

**Severe poverty:** 10% of children. This means they are going without the things they need and their low family income means they do not have any opportunity of changing this. These are the children experiencing material hardship, and live in families in income poverty.

**Persistent poverty:** 3 out of 5 children in poverty are in poverty for long periods. 70% of poor children live in rental accommodation. 2 out of 5 poor children come from families where at least one adult is in full-time (FT) work or is self-employed. These children are likely to live in poverty for many years of their childhoods. Persistent poverty is defined as having lived in income poverty over a seven-year period.

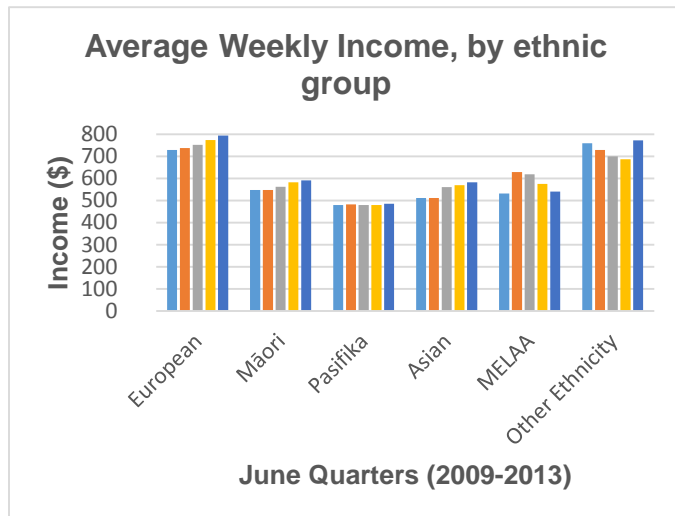
The Child Poverty Monitor 2013.

### Causes of Child Poverty

- Wage Inequality among ethnic groups
- Unequal opportunity and educational outcomes
- Increasing housing costs

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The bar graph created from Statistics NZ data shows us the average weekly income for different ethnic groups in NZ over the last five years. Europeans income was \$728 in 2009 and increased to \$793 in 2013.



For Māori, it was \$548 and increased to \$591 in 2013, and Pasifika income was \$479 and only increased by seven dollars to \$486 in 2013.

Asian income was \$512 and increased to \$583 and Middle Eastern, Latin American and African income (MELAA) was \$531 in 2009 and only \$540 in 2013. Other Ethnicities income was \$759 and \$772 in 2013.

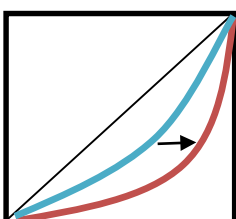
Using 2013 figures, Māori on average earn \$202 per week less, and Pacific peoples earn on average \$307 per week less than Europeans do. Asians earn \$210 less weekly and the MELAA group earn \$253 less than Europeans do.

The greatest income gap is between the Europeans and Pacific peoples, followed by the MELAA group, Asian and Māori groups. There is income inequality

among ethnic groups that is also inequitable if the income differences in these groups is being caused by various forms of discrimination by employers and the current education structure.

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### Lorenz Income Curves



The Lorenz Curve Model can show the extent of the inequality of income in an economy, the vertical axis shows the cumulative percentage of national income, and the horizontal axis shows the cumulative percentage of households. The further the Lorenz Curve is away from the line of absolute equality the more unequal the distribution of income. The red line in the model is shifting right reflecting growing income inequality in NZ, the gap between the rich and poor is widening.

For example, in 2010 the average pay for CEOs was \$1.39 million and this increased by 3.3% to \$1.44 million in 2011. The average for their employees, estimated by dividing the total pay bill by the number of staff was \$63,960, up just 0.8% on the previous year. The CEOs get 22.5 times the

pay of the average workers so this highlights why wage inequality will cause income to be distributed unequally and the gap between these groups will continue to grow each year if the CEOs receive larger wage percentage increases than other groups of workers.

Educational outcomes is another cause of income inequality, for instance people that have no education are far more likely to be unemployed than the educated. More school leavers with none or few qualifications add to the supply of labour that is low skilled meaning firms can hire workers and only pay the minimum wage rate of \$14.25 per hour, because if you don't take the job someone else will.

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This means that people with little or no qualifications (low skilled) are more likely to earn a low income and may not be able to afford proper housing and food; therefore, they are more likely to live in poverty. The children who live in these households are more likely to have insufficient food, so less energy and less attention is paid to learning in school, and they get sick more so are absent more often. This leads to less education, fewer qualifications and low paying jobs or unemployment, so it is harder for these children to get out of the poverty cycle.

15

They do not experience the opportunity of other children who come from wealthier households with more opportunity and resources to get a good education and become high-income earners.

While public education is provided for every child in NZ, not all children live in households with enough resources to make the most of this opportunity, and therefore state education is not equitable and does not provide equal educational outcomes between different ethnic groups.

Higher housing costs have also made income inequality and child poverty worse, because low to middle-income households struggle to pay for necessities like food, clothing, basic household services, transport, medical care and education after housing costs are paid.

In 2013, about 27% of households had housing costs that took more than 30% of their disposable (after tax) income, for the lowest income group of households it was 42% and for the second lowest group it was 36%. In June 2013, almost all renters receiving the Accommodation Supplement (93%) spent more than 30% of their income on housing costs and 3 out of 4 spent more than 40%, and nearly half of them spent more than 50% of their disposable income on rent.

In 2007, 33% of people entitled to the Accommodation Supplement were receiving the maximum payment, but this increased to 50% in 2013.

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The Ministry of Social Development's *2014 Incomes Report: Overview and Summary* found that:

- Poverty rates for children in beneficiary families are typically around 75% to 80%, much higher than for children in families with at least one adult in full-time employment (11% in 2012 and 2013).
- On average from 2007 to 2013, two in five poor children (38%) were from households where at least one adult was in full-time employment or was self-employed, down from around one in two (50%) before Working for Families (2004) and have become the 'working poor'.
- Children in sole-parent families have a higher risk of income poverty than those in two-parent families (51% compared with 13% in 2013). Half of poor children lived in sole-parent families and half in two-parent families in 2013.
- Poverty rates for Māori and Pacific children are consistently higher than for European/Pakeha children: on average from 2011 to 2013, just under half (48%) of poor children were Māori or Pacific.
- Seven out of ten poor children live in rental accommodation.

<https://www.msdc.govt.nz/about-msdc-and-our-work/publications-resources/monitoring/household-incomes/>

[Student also listed the various impacts of KidsCan, 'Feed the Kids' campaign, 'Vocational Pathways', and BYOD devices funded by schools/communities on certain groups of NZ society. Additionally, the student explained what effect the charities, political campaigns and new education policies may have on NZ child poverty and inequity.]

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	Grade Boundary: High Not Achieved
6.	<p>For Achieved, the student needs to analyse a contemporary economic issue of special interest using economic concepts and models.</p> <p>This involves:</p> <ul style="list-style-type: none"> <li>• identifying, defining or describing concepts related to the contemporary economic issue</li> <li>• providing an explanation of causes of the contemporary economic issue using economic models</li> <li>• providing an explanation of the impacts of the contemporary economic issue on various groups in NZ society.</li> </ul> <p>The student has defined the economic concepts related to the contemporary economic issue of child poverty in New Zealand, using relevant economic information (18).</p> <p>The student has partially explained causes of NZ child poverty, using quoted and paraphrased economic information, and economic concepts (19).</p> <p>The student has listed the various impacts on certain groups of NZ society, and explained what effect the charities, political campaigns and new education policies may have on NZ child poverty and inequity (20).</p> <p>To reach Achieved, the student could use the Labour Market model to illustrate an increase in the supply of low skilled labour, and the effect of having a minimum wage rate on involuntary unemployment in this labour market. The student could also use the Lorenz Curve model to illustrate and explain whether income inequality has increased or decreased over the last decade or two (21).</p>

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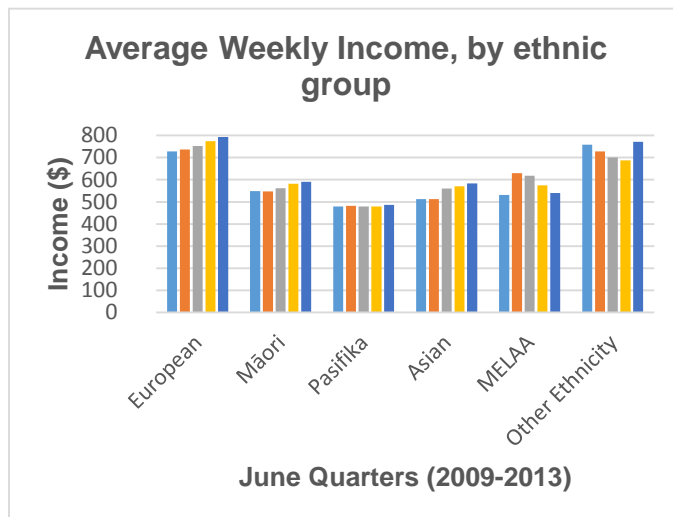
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### Lorenz Curve Model...

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