

Government Policies

AS91227: ANALYSE HOW GOVERNMENT POLICIES
AND CONTEMPORARY ECONOMIC ISSUES
INTERACT

Introduction:

The policy objective is to promote sustainable economic growth of the New Zealand economy.

Economic growth occurs when real output increases over time. Real output is measured by Gross Domestic Product (GDP) at constant prices, so that the effect of price rises on the value of national output is removed.

Sustainable economic growth is a rate of growth which can be maintained without creating other significant economic problems, and do not diminish the resources and welfare of future generations.

There is a trade-off between rapid economic growth today, and growth in the future. Rapid growth may exhaust resources and create environmental problems, impacting the future generation. Therefore, sustainable economic growth is preferred.

For an economy to continue growth in the future, it needs to increase its capacity to grow. An increase in an economy's productive capacity can be shown by an outward shift of the PPF curve.

Periods of growth are triggered by increases in aggregate demand, which shifts the AD curve right. However, any sustained growth must involve an increase in productive capacity or slight decrease in aggregate demand to prevent inflation via demand-pull inflation and cost-push inflation as a flow-on effect.

Policy One: Building and improving New Zealand roads

Policy Two: Implementing and improving fibre connections throughout New Zealand

Policy Three: Improving human capital through increasing education

Policy Package Summary:

Policy Examples:

In 2013, the New Zealand transport agency estimated the cost of traffic congestion at about \$1.25 billion a year. By 2017, NZIER estimated the value of de-congesting Auckland alone at \$900 million to \$1.3 billion a year.

(Source: Roads information sheet)

A 2014 Fiber Broadband Association study found higher per capita GDP (1.1%) in communities where gigabit Internet was available. In dollar terms, the 14 gigabit communities analysed by the Fiber Broadband Association enjoyed approximately \$1.4 billion in additional GDP over other, similarly situated communities.

(Source: <https://starterkit.fiberbroadband.org/page/economic-impact>)

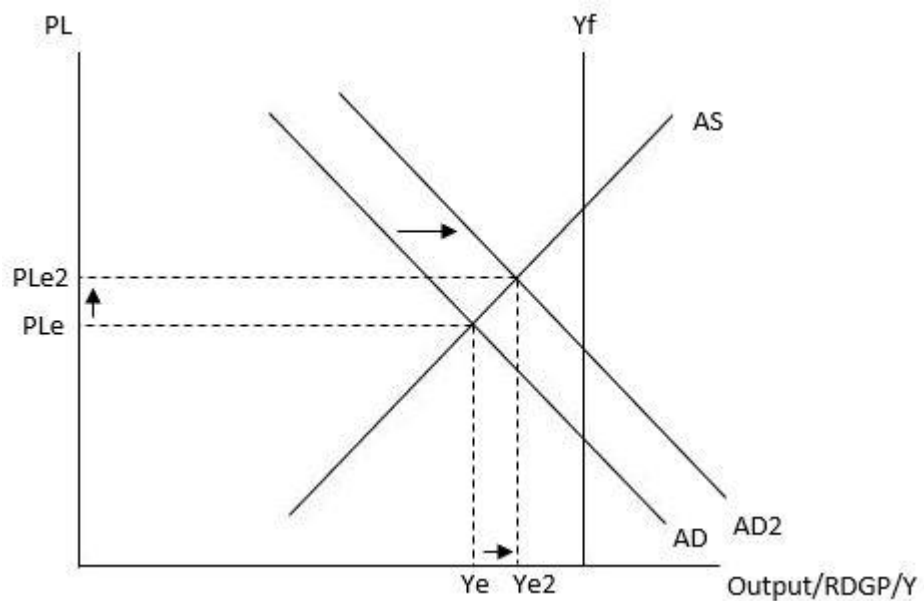
Lifting the average years of schooling of the working age population by one additional year (relative to the baseline) by 2060 might add as much as 0.15 percentage points to real output growth and up to nearly 7% to the level of GDP over the long run.

(Source: Policy ideas handout)

Effects of Policies:

Aggregate Demand Curve:

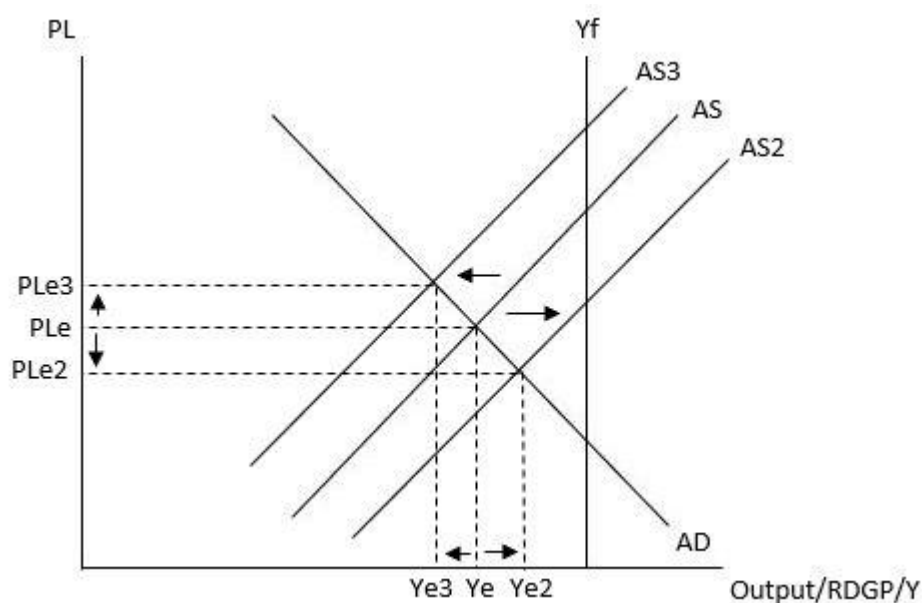
The government will spend money to implement all three policies, thus Aggregate Demand will increase from AD to AD2. Aggregate Demand is the total demand for all goods and services in an economy, in which government spending is a component of. So



as AD increases from AD to AD2, output increases from Y_e to Y_{e2} leading to growth and more employment, and the general price level increases from P_{Le} to P_{Le2} , causing demand-pull inflation.

In the short-run as flow-on effects, there will be an increase in employment as construction of roads and fibre occur, as well as more teachers and better workers become employed, therefore an increase in household incomes leading to an increase in consumption as people can now afford more. There's also an increase in roading and fibre firms' profits. Resources will be used up for about 5 – 10 years, however they won't be exhausted as explained below through other policies and long-term effects, overall being sustainable.

Aggregate Supply Curve:



Aggregate Supply is the total supply of goods and services in an economy. Initially, nominal wages are likely to increase in response to the demand for workers, causing AS to decrease from AS to AS3. Thus, output decreases from

Y_e to Y_{e3} , and the general price level increases from P_{Le} to P_{Le3} , causing cost-push

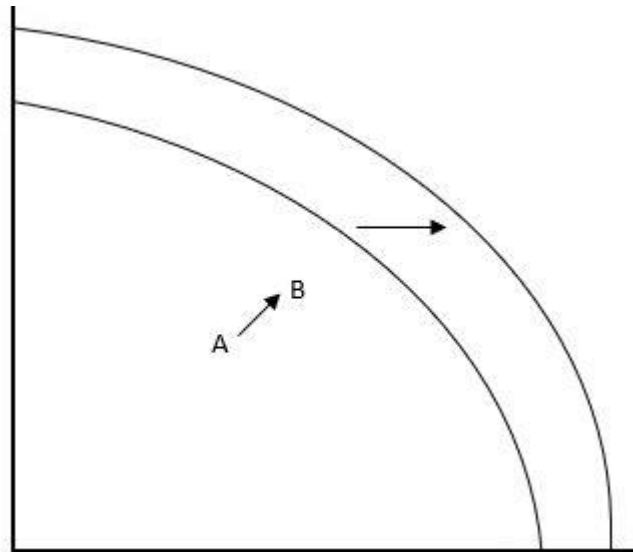
inflation.

However, this should eventually be balanced out as productivity will increase due to improved transportation and human capital, as well as a decrease in cost of production due to improved roading, fibre and human capital overall. Businesses will also be created or become more productive starting to use fibre. This will cause Aggregate Supply to increase from AS to AS2, causing an increase in output from Y_e to Y_{e2} , leading to growth and more employment, and a decrease in the general price level from PL_e to PL_{e2} , decreasing inflation and relieving inflationary pressure.

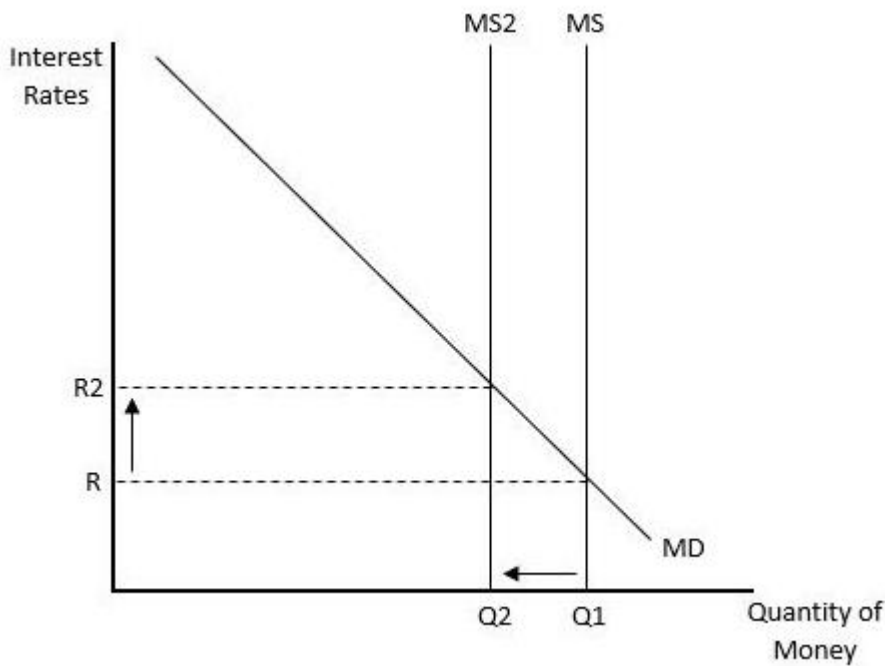
In the long-run as a flow-on effect, there will be an increase in efficiency as congestion decreases and as broadband becomes faster.

Production Possibility Frontier:

The Production Possibility Frontier shows the maximum output combinations possible given its fixed level of resources and technology. As employment rises due to the construction of roads and fibre, more resources become utilised. Thus, point A will move to point B, becoming closer to the line of full employment. In the long-term as a flow-on effect, the PPF curve shifts outwards as firms' efficiency and productive capacity increases due to a higher quantity of skilled workers (and more workers in general) from education and improved transportation and fibre being faster, developed technologies compared to before. This is sustainable as although resources are used up immediately for about 5 – 10 years, the long-term effects ensure that there is new resources and technology being made for a sustainable future.



Money Supply Diagram (Effect of OCR):

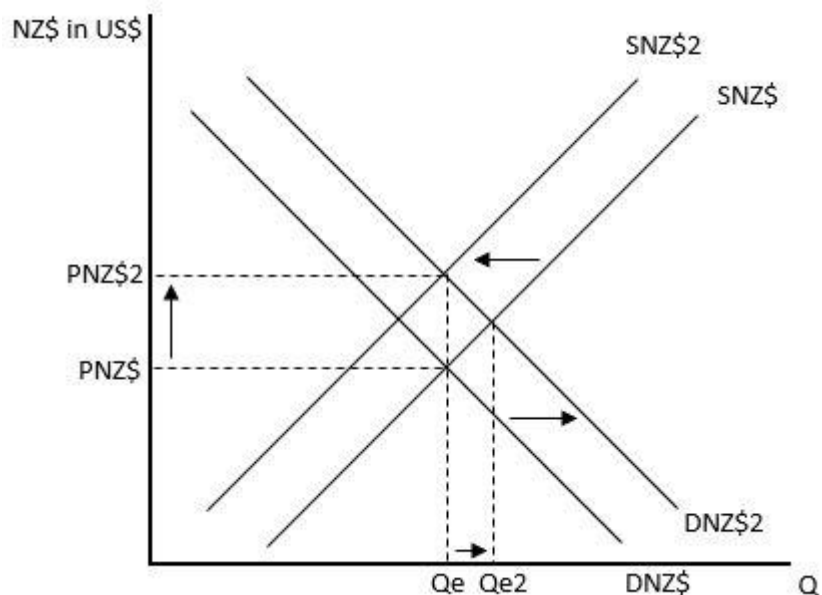


In the Policy Target Agreements, price stability is currently defined as keeping the rate of inflation between 1-3% (measured by the CPI). Price stability is considered important to try and stop the negative effects of inflation, such as it being a disincentive to save for households and invest for firms, cost of production quickly

increases, fiscal drag occurs, and exports decrease as they become less competitive. Thus, a contractionary monetary policy done by the Reserve Bank (RBNZ) is added to this package to minimise the impact on the price level and keep the rate of inflation as desired. This is done through two main methods: the Official Cash Rate or OCR (interest rate set by the RBNZ) and Open Market Operations or OMO (selling of Reserve Bank Bills). The Quantity of Theory of Money ($MV = PQ$) states the money supply is equal to the price level or rate of inflation. Thus, a decrease in the money supply will cause the general price level to decrease, relieving inflationary pressure. An increase in the OCR or selling of Reserve Bank Bills will influence the money supply to decrease from MS to MS2 and interest rates to increase from R to R2, thus the quantity of money decreasing from Q1 to Q2.

Demand and Supply of New Zealand Dollar:

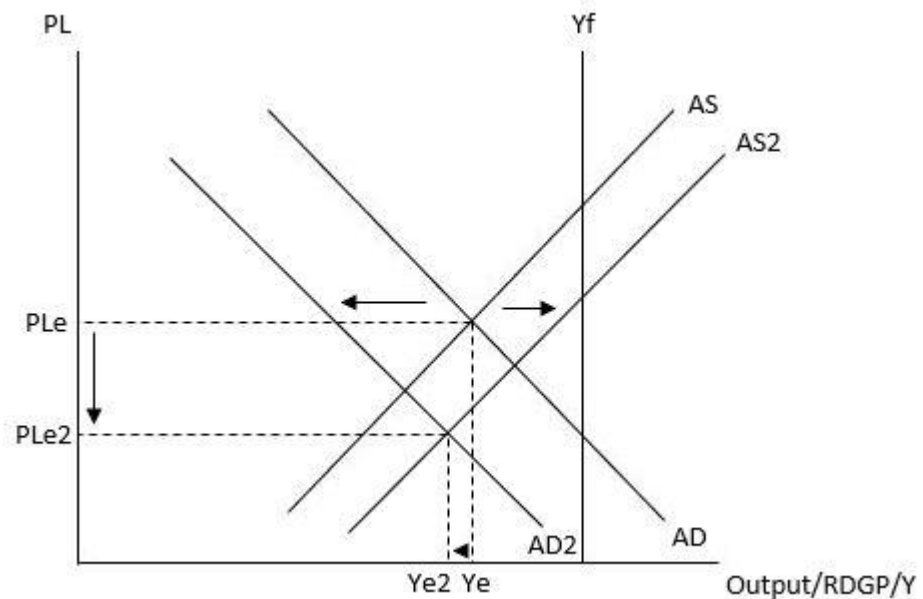
This causes wholesale and retail interest rates to increase, so savings increase and borrowing, consumption and investment decrease. The NZ dollar also appreciates from PNZ\$ to PNZ\$2, causing an increase in demand for it from DNZ\$ to DNZ\$2, yet there's a decrease in supply from SNZ\$ to



SNZ\$2 due to the increase in the OCR or selling of Reserve Bank Bills.

Impact of Appreciation of New Zealand Dollar on Aggregate Demand and Supply:

Due to the appreciation of the NZ\$, Exports (X) decrease, Imports (M) increase and Net Exports (X-M) decrease. The higher exchange rate also lowers the cost of oil and other raw imported materials, reducing firms' costs of production, so AS



increases from AS to AS2, reducing inflationary pressure further so no cost-push inflation. However, AD decreases from AD to AD2 as exports become less competitive and the demand for them decreases, further reducing inflationary pressure so no demand-pull inflation. Though overall, a decrease in investment, employment and growth is expected, as Ye decreases to Ye2.

Policy Package Conclusion:

The proposed policies of building and improving New Zealand roads, implementing and improving fibre connections throughout New Zealand, and human capital through increasing education will increase Aggregate Demand and Aggregate Supply, through short-term and long-term effects as explained. All negative flow-on effects of inflation will be counteracted by the short-term adjustment made to the OCR, maintaining price stability. Resources will be used often for the first 5 – 10 years, however new resources and technology will be made from this creating a sustainable future. Thus, the policy objective of sustainable economic growth of the New Zealand economy will be achieved.