

Response to FEC regarding house price projections

Introduction

Section 1 – the role of house price projections at the Reserve Bank

The Reserve Bank pays close attention to developments in the housing market for a number of reasons:

- Wealth is one driver of household spending, and equity in housing represents 55 percent of household net wealth. Rising house prices leads to higher household spending, which in turn influences economic activity, employment and consumer price inflation. Rising house prices also more directly influence a number of components of the Consumers Price Index, such as construction costs and rents. As a result, actual and projected house prices are an important input into monetary policy decisions.
- Housing market outcomes are also important for financial stability, as unsustainable house prices can be an indicator of future financial instability. For this reason, we have been further developing our tools to assess the sustainability of house prices. Our assessment of house price sustainability feeds into decisions on the use of some of our financial stability tools such as loan-to-value ratio restrictions and whether to introduce debt serviceability restrictions.

For both of these purposes, we form projections of the most likely direction of house prices. House prices, as with all asset prices, reflect buyers' expectations of their future earnings. This means that house prices can move rapidly when expectations change, making them inherently volatile.

We update our projections for house prices every six weeks, reflecting the latest developments over that period. This means we can adapt our policy settings as data evolves, thereby avoiding policy surprises.

Section 2 – the role of housing in the Reserve Bank's mandate

The objectives of monetary policy are price stability and maximum sustainable employment. As noted above, house prices have a direct impact on these objectives. In addition, the Remit for the Monetary Policy Committee (MPC) requires the MPC to assess the effect of its monetary policy decisions on the Government's policy to support more sustainable house prices, including by dampening investor demand for existing housing stock, which would improve affordability for first-home buyers.

House prices are also important for the Reserve Bank's financial stability objectives of promoting a sound and efficient financial system. In pursuing these objectives, the Reserve Bank has been directed to have regard to the Government's housing policy as described above.

Table A: Summary of the relationship between housing and the Reserve Bank

	Monetary policy	Financial Stability (Prudential) policy
Objectives		
Primary objective	Price stability Support maximum sustainable employment	Promoting the maintenance of a sound and efficient financial system. Avoiding significant damage to the financial system that could result from the failure of a registered bank.
Other objectives	Have regard to the efficiency and soundness of the financial system Seek to avoid unnecessary instability in output, interest rates and the exchange rate Discount events that have only transitory effects on inflation	Reduce the risk that the financial system amplifies a severe downturn. Have regard to the impact of prudential policy on economic growth.
Housing considerations	Assess the effect of its monetary policy decisions on the Government's policy to support more sustainable house prices, including by dampening investor demand for existing housing stock, which would improve affordability for first-home buyers.	Have regard to the Government's policy to support more sustainable house prices, including by dampening investor demand for existing housing stock which would improve affordability for first-home buyers.
Impact of housing on objectives	MPC take housing market dynamics into account when forming monetary policy, as housing wealth is an important driver of household spending and housing market-related prices are included in the Consumer Price Index.	The Bank takes housing market dynamics into account when assessing financial stability risks and forming prudential policies, as mortgages are the NZ banking system's largest exposure and houses are the largest household asset.
Policy tools		
Tools	The level of retail interest rates as influenced by: Official Cash Rate; Large Scale Asset Purchases; Funding for Lending Programme; and Purchase of Foreign Assets	Capital and liquidity requirements Governance Disclosure Outsourcing Resolution Macro-prudential Supervision
Impact of tools on housing	Monetary policy affects house prices and housing affordability by influencing mortgage and renting costs, economic growth and employment.	Prudential regulation affects the availability and cost of mortgages by placing requirements and restrictions on mortgage lenders.

Our assessment of the current sustainability of house prices is more important than our projections. We have laid out our initial thinking on a sustainability framework that will be refined over time. Table B describes how we define and assess sustainable house prices, and how this relates to housing affordability. We are coordinating with other government agencies on policy initiatives that will support more sustainable house prices.

Table B: What we mean by sustainable versus affordable house prices

	Sustainable house prices	Affordable house prices
Definition	The level that house prices will converge to over several years given the outlook for supply and demand	The international standard is that adequate and decent housing accommodation should not cost the worker more than a reasonable proportion of income (e.g. 30% of their income), whether by way of rent for, or by way of payments towards the purchase of, such accommodation.
Distributional	While house price sustainability doesn't consider who the buyer is, the direction from the Minister of Finance includes dampening investor demand to support affordability for first home buyers.	Majority of households are able to buy their own home, and practically everybody can afford to rent.
Key determinants	Changes to policy settings, the economy, supply and demand impact sustainable house prices. Key drivers of demand are incomes, trends in interest rates, and demographic variables. Key drives of supply include the supply of developable land, construction costs, and the existing stock of residential dwellings.	The price of housing relative to income determines affordability. In an efficient market, the price of housing is set by replacement value (cost of constructing a new house plus land price). In an uncompetitive urban land market, prices are set as the net present value of the future expected income stream.
Metrics	Cost of owning vs renting, housing returns relative to other investments, metrics of new supply and new demand	Home ownership rates, rent to income ratios (distribution as well as central tendency), cost of owning as share of income.

Section 3 – how do we project house prices?

House prices are influenced by a wide range of factors and no one modelling approach is able to capture all of these influences.

Our core projection model assumes that in the long run house prices grow at around the rate of nominal GDP growth (about 5 percent per year). The rate at which house prices converge to this long-run assumption depends on current momentum in the housing market, and forecasts of mortgage interest rates and net immigration. These factors have been shown by our analysis to most reliably explain house prices.

This explains a lot, what a joke, GDP growth completely Discounts Investment Demand

However, there are a range of other important factors that can influence house prices. These include regulatory and tax changes, housing supply developments and changes in employment and income. We have a range of supplementary models and techniques to incorporate the impacts of these factors:

- We analyse a wide range of timely data and engage with real estate and banking industry experts to better understand near-term momentum in the housing market.

Appears to Completely Ignore Global Real Estate Investment demand/trends

- We check the consistency of our house price projections with the outlook for employment and income growth.
- We use investor valuation models and published research to estimate how changes to tax settings, such as removal of interest deductibility, influence cash flow for property investors and the valuation of houses.
- We have research on the impact that macro-prudential tools such as loan-to-value ratio restrictions have had on house prices.
- We assess how current and forecast house building activity compares to population and demographic drivers of housing demand.

This additional analysis is used to adjust the projections from our core economic model.

Section 4 – external validation of forecasts

The Reserve Bank projects house prices independently of any other agency, and for reasons of market sensitivity, these forecasts are not shared with any third party prior to the release of Monetary Policy Statements (MPS).

Nevertheless, there are a range of ways in which our projection methodology is validated:

- We discuss housing market developments and analysis of policy impacts with other housing-focussed agencies (such as Treasury and the Ministry of Housing and Urban Development).
- We compare our projections with those from other forecasters, and seek to understand differences in view. This includes sessions with trading bank Chief Economists to discuss projections after release.
- We regularly evaluate deviations from our projections, and compare this to other forecasters.

Appears to Completely Ignore Investment housing trends or demands

Section 5 – explanation of recent Reserve Bank house price projections

Prior to the onset of COVID-19 we observed an increase in house price growth at the end of 2019. Our February 2020 projections were for annual house price inflation to slow in response to projected moderation in net immigration, high residential construction activity, and the effects of past lower mortgage rates fading.

Our baseline scenario for house prices changed materially as a result of the impacts of COVID-19. In May 2020 we assumed that house prices would decline by around 9 percent by the end of 2020. At that time our central projection was for unemployment to rise to 9 percent, and that was expected to exert material downward pressure on the housing market. High levels of unemployment were also expected to lead mortgage lenders to be more cautious in their lending decisions, reducing the availability of mortgage loans.

Over the course of 2020 the economy proved more resilient than we had expected, due to the effective health response and significant fiscal and monetary support for the economy. The much stronger than expected economy, and the associated improvement in job security, has been a key reason for higher house price outcomes. As of the March 2021 quarter, the unemployment rate was 4.7 percent, well below earlier projections.

Demand for housing has also been supported by other unanticipated factors. An initial surge of returning New Zealanders and visitors deciding to stay at the start of COVID-19 led to higher population growth than forecast. Momentum dynamics, which could reflect factors such as expectations of future capital gains have also played a part in amplifying house price

growth. In addition, lower interest rates have lifted housing demand by making mortgages more affordable. Lower interest rates reflect both long-term declines in global interest rates over time and the Reserve Bank's stimulatory monetary policy settings (see chapter 4 of the May 2021 MPS).

Our most recent projections for house prices in the May 2021 MPS were for a slowing in house price growth. This forecast slowdown reflects much slower population growth over most of 2020 and 2021, tax policy changes, the reintroduction and tightening of loan-to-value ratio restrictions, the waning impact of interest rate declines over 2019 and 2020, and increased supply from strong residential construction.

Still zero reference to any investor driven demand

Responses to FEC questions

1. *Please provide a natural-language explanation of the process undertaken when determine a forecast for house prices.*

Please see section 3 above.

2. *What is the list of inputs the Reserve Bank has used to inform their model for house price changes, and for each input, what is the source of the data?*

The Reserve Bank projects the house price index that is published by Corelogic. Because of publication lags with this series, the timelier house price index produced by the Real Estate Institute of New Zealand (REINZ) is used to estimate more recent moves in prices. Our core model uses migration data from Statistics NZ, and interest rate data we collect from banks. Supplementary models use a wide range of data from Statistics NZ, Corelogic, interest.co.nz, Ministry for Housing and Urban Development, REINZ, and our own data collected from financial institutions.

Still no mention of Global Trends

3. *What are the variables the Reserve Bank has used to inform their model for house price changes in its May MPS?*

Please see answer to question 2.

4. *What process did the Reserve Bank follow to calculate annualised forecast house price changes, as shown in its May MPS?*

The process described in section 3 above was used to generate a forecast for the level of house prices at a quarterly frequency. Annual house price growth forecasts were derived from this.

5. *What data sets has the Reserve Bank used from other government departments to inform their model for house price changes?*

Please see answer to question 2.

6. *What peer review or external audit, if any, does Reserve Bank commission to review its house price forecasts?*

Please see section 4 above.

7. *What data sets does the Reserve Bank refer to determine their model for house price changes?*

Please see answer to question 2.

8. *What data sets, if any, has the Reserve Bank used from third parties (non-Government departments) to inform their model for house price changes, as shown in its May MPS?*

As discussed in the answer to question 2, data from Corelogic, REINZ and interest.co.nz has been used.

9. *Did the Reserve Bank use any external consultants to inform, review or check their house price forecasts or the model that informs them in its May MPS?*

Due to the sensitivity of MPS forecasts, external consultants are not used to review forecasts. The general approach to ensuring the validity of forecasts is described in section 4 above.

10. *What is the variance on the Reserve Bank's model for house price changes in its May MPS?*

Since our projections combine information from models with other relevant information, we assess the variance of our projections by looking at past forecast performance. Since 2010, on average our forecasts for annual house price inflation one year in the future have been out by 5.2 percentage points ('mean absolute deviation'). Excluding the COVID-19 period, the same metric is 3.9 percentage points.

Over the past decade, the key drivers of this deviation have been that migration has tended to turn out higher than forecast, and mortgage interest rates have tended to be lower than our forecasts would imply. Both of these factors have contributed to house price inflation tending to turn out higher than anticipated over this period.

11. *What sensitivity analysis, if any, has Reserve Bank conducted for its house price forecasts and what is the potential variance?*

Through the process of updating our projections with new information, we regularly observe how our forecasts change as our assumptions about key drivers change (e.g. migration, interest rates, and other factors). Our projections are also influenced by the sensitivity of our models and frameworks to these inputs. There is significant uncertainty about both the outlook for the underlying drivers, as well as the sensitivity of house prices to them. Reflecting this, we treat our projections as having significant uncertainty around them, and avoid being overly reliant on them when making policy decisions.

Their annual projections were and will continue to be out by more than most peoples mortgage rates(pre-covid) yet the majority of the country still works of these incorrect figures.

12. Does the Reserve Bank house price forecast model include an assessment of housing demand and if so how does Reserve Bank assess that demand, please list all factors considered and the data or information used to measure that factor?

The Reserve Bank's projection approach does not forecast demand and supply separately. Of the factors discussed in section 3 above, migration, interest rates, and changes in tax and regulatory settings are most likely to influence the demand for housing.

Global Investment Demand not mentioned again, is this stupidity or deliberate

13. Does the Reserve Bank house price forecast model include an assessment of current and future housing supply and if so how does Reserve Bank assess likely housing supply?

As part of the Reserve Bank's economic projections, we project residential investment, which includes the construction of new houses, alterations and additions to existing houses, and transaction costs associated with the sale of existing houses. The key determinants of this projection are interest rates, house prices, population growth and an assessment of the capacity of the building sector. As discussed in section 3 above, an assessment of new housing supply relative to housing demand is one of the factors considered in setting house price projections.

finally mentions investment, but only in reference to the Supply "building" Side. Demand side "purchase demand" remains completely unmentioned

14. Does the Reserve Bank house price forecast model include an assessment of the gap between housing supply and demand and if so what does Reserve Bank assess that gap to be now and how does it expect that gap to change over the next twelve months?

Great Question

only demand side mention is migration

The Reserve Bank does not have a quantitative estimate of the gap between housing supply and demand. Our projections are for building activity to remain at high levels over the next 12 months, while housing demand will be more moderate due to low migration. These projections are consistent with a closing in the gap between supply and demand.

15. Does the Reserve Bank house price forecast model include a measurement of current housing demand and predicted future housing demand and if so what are those numbers?

Same Question

Please see answer to question 12.

Same Question Does the Reserve Bank house price forecast model include a measurement of current housing supply and predicted future housing supply and if so what are those numbers?

Please see answer to question 13.

17. Has the Reserve Bank ever engaged with Treasury to compare the methodologies used for house price forecasting and if not why not?

The Treasury and the Reserve Bank produce forecasts independently. The forecasting teams of both agencies regularly engage to discuss the forecasts and forecast methodology of each agency.

In June 2021, the Reserve Bank, Treasury, and the Ministry of Housing and Urban Development established a technical working group to share data and analysis around the

assessment of housing sustainability, and to compare forecasting methodologies and economic modelling.

18. *What is the margin of error on the Reserve Bank's model for house price changes, as shown in its May MPS?*

Please see answer to question 10 above.

19. *What is the table of data behind the Reserve Bank's model for house price changes, as shown in its May MPS? Please provide this data, electronically and in summary form if necessary.*

A spreadsheet of the May 2021 MPS projections are attached.

20. *What assumptions have been made in order to establish the Reserve Bank's model for house price changes in its May MPS?*

Our May projections were for a significant slowdown in house price growth over the course of 2021, followed by a period of modest growth. This forecast rests on assumptions that high construction activity and weaker population growth would result in a gradual alleviation of supply shortages, and that the Official Cash Rate would be gradually increased from the latter-half of 2022. It was also assumed that the re-imposition of loan-to-value restrictions and changes to the tax deductibility of interest would reduce house price growth in the near-term.

In the long-term, house price growth is assumed to converge to around the rate of nominal GDP growth.

21. *Which other government agencies, if any, provide input into the Reserve Bank's house price forecast?*

Please see answer to question 17.

22. *Which other agencies, if any, does Reserve Bank share its house price forecast model with?*

Please see answer to question 17.

I refuse to accept that the forecasting teams of both Treasury and the reserve bank are stupid enough to exclude Investment demand from their "assumptions" by accident.

logically this has to be a conscious choice to never include anywhere here, which is why property prices will continue to sky rocket because the people making the decisions are either ignorant, misinformed or both.

why on earth would you compare the whole housing market (existing + new) to GDP maybe you could do this for estimating build cost of new houses (less than 10% of NZ housing market), as the construction costs are relevant to GDP. land costs (over 90% of our housing market) however are totally and completely unrelated to GDP, so any forecasts are naturally going to be very very wrong, as observed above

Note to users: These projections are conditional on a wide range of assumptions. They are subject to significant uncertainty, and may change substantially over time. Please refer to the accompanying Monetary Policy Statement for discussion of the |
The Reserve Bank of New Zealand may change the number, type, detail and definitions of projections published in this table at any time.

Series		Gross domestic product (production)				Potential output			Output gap		Private consumption		
Source		Stats NZ, RBNZ estimates				RBNZ estimates			RBNZ estimates		Stats NZ, RBNZ estimates		
Seasonal adjustment		Seasonally adjusted				Seasonally adjusted			Seasonally adjusted		Seasonally adjusted		
Units/transformation		\$09/10 millions		Quarterly % change		\$09/10 millions		Quarterly % change		\$09/10 millions		Quarterly % change	
Identifier		gdp		gdpqpc		potgdp		potgdpqpc		outputgap		c	
				gdpapc				potgdppc				capc	
31/03/2000		37934		1.5		37713		0.9		0.6		20493	
30/06/2000		37951		0.0		38023		0.8		-0.2		20806	
30/09/2000		38100		0.4		38342		0.8		-0.6		20901	
31/12/2000		38176		0.2		38652		0.8		-1.2		20750	
31/03/2001		38305		0.3		38948		0.8		-1.7		20768	
30/06/2001		38849		1.4		39269		0.8		-1.1		21110	
30/09/2001		39149		0.8		39592		0.8		-1.1		21371	
31/12/2001		39732		1.5		39938		0.9		-0.5		21513	
31/03/2002		40086		0.9		40299		0.9		-0.5		21411	
30/06/2002		40620		1.3		40648		0.9		-0.1		21986	
30/09/2002		41079		1.1		41012		0.9		0.2		22202	
31/12/2002		41631		1.3		41383		0.9		0.6		22556	
31/03/2003		41871		0.6		41751		0.9		0.3		22971	
30/06/2003		42048		0.4		42127		0.9		-0.2		23208	
30/09/2003		42940		2.1		42509		0.9		1.0		23525	
31/12/2003		43489		1.3		42897		0.9		1.4		24037	
31/03/2004		44234		1.7		43301		0.9		2.2		24495	
30/06/2004		44621		0.9		43698		0.9		2.1		24450	
30/09/2004		44750		0.3		44087		0.9		1.5		25153	
31/12/2004		44903		0.3		44458		0.8		1.0		25339	
31/03/2005		45419		1.1		44824		0.8		1.3		25418	
30/06/2005		46144		1.6		45191		0.8		2.1		26025	
30/09/2005		46381		0.5		45557		0.8		1.8		26053	
31/12/2005		46190		-0.4		45906		0.8		0.6		26371	
31/03/2006		46957		1.7		46236		0.7		1.6		26564	
30/06/2006		47169		0.5		46537		0.7		1.4		26551	
30/09/2006		47462		0.6		46840		0.7		1.3		26771	
31/12/2006		47892		0.9		47129		0.6		1.6		27235	
31/03/2007		48469		1.2		47414		0.6		2.2		27553	
30/06/2007		48908		0.9		47687		0.6		2.6		27780	
30/09/2007		49280		0.8		47963		0.6		2.7		27952	
31/12/2007		49362		0.2		48230		0.6		2.3		28048	
31/03/2008		49211		-0.3		48478		0.5		1.5		28436	
30/06/2008		49059		-0.3		48719		0.5		0.7		27953	
30/09/2008		48883		-0.4		48922		0.4		-0.1		27968	
31/12/2008		48560		-0.7		49100		0.4		-1.1		27979	
31/03/2009		48075		-1.0		49260		0.3		-2.4		27343	
30/06/2009		48052		0.0		49422		0.3		-2.8		27913	
30/09/2009		48291		0.5		49582		0.3		-2.6		28097	
31/12/2009		48892		1.2		49743		0.3		-1.7		28362	
31/03/2010		49047		0.3		49919		0.4		-1.7		28642	
30/06/2010		49401		0.7		50100		0.4		-1.4		28790	
30/09/2010		49284		-0.2		50295		0.4		-2.0		28817	

31/12/2010	49031	-0.5	0.3	50503	0.4	1.5	-2.9	28822	0.0	1.6
31/03/2011	49564	1.1	1.1	50709	0.4	1.6	-2.3	29057	0.8	1.4
30/06/2011	49808	0.5	0.8	50922	0.4	1.6	-2.2	29308	0.9	1.8
30/09/2011	50343	1.1	2.1	51153	0.5	1.7	-1.6	29726	1.4	3.2
31/12/2011	50626	0.6	3.3	51400	0.5	1.8	-1.5	29888	0.5	3.7
31/03/2012	50914	0.6	2.7	51670	0.5	1.9	-1.5	30183	1.0	3.9
30/06/2012	51091	0.3	2.6	51950	0.5	2.0	-1.7	30180	0.0	3.0
30/09/2012	51218	0.2	1.7	52234	0.5	2.1	-1.9	30166	0.0	1.5
31/12/2012	52027	1.6	2.8	52541	0.6	2.2	-1.0	30580	1.4	2.3
31/03/2013	51859	-0.3	1.9	52863	0.6	2.3	-1.9	30926	1.1	2.5
30/06/2013	52467	1.2	2.7	53203	0.6	2.4	-1.4	31337	1.3	3.8
30/09/2013	52761	0.6	3.0	53570	0.7	2.6	-1.5	31450	0.4	4.3
31/12/2013	52895	0.3	1.7	53954	0.7	2.7	-2.0	31768	1.0	3.9
31/03/2014	53673	1.5	3.5	54357	0.7	2.8	-1.3	32044	0.9	3.6
30/06/2014	53969	0.6	2.9	54770	0.8	2.9	-1.5	32216	0.5	2.8
30/09/2014	54655	1.3	3.6	55201	0.8	3.0	-1.0	32654	1.4	3.8
31/12/2014	55514	1.6	5.0	55635	0.8	3.1	-0.2	32740	0.3	3.1
31/03/2015	55702	0.3	3.8	56070	0.8	3.2	-0.7	33126	1.2	3.4
30/06/2015	56092	0.7	3.9	56507	0.8	3.2	-0.7	33448	1.0	3.8
30/09/2015	56673	1.0	3.7	56968	0.8	3.2	-0.5	33795	1.0	3.5
31/12/2015	57286	1.1	3.2	57426	0.8	3.2	-0.2	34342	1.6	4.9
31/03/2016	57968	1.2	4.1	57891	0.8	3.2	0.1	34629	0.8	4.5
30/06/2016	58494	0.9	4.3	58357	0.8	3.3	0.2	35489	2.5	6.1
30/09/2016	58996	0.9	4.1	58826	0.8	3.3	0.3	36078	1.7	6.8
31/12/2016	59211	0.4	3.4	59288	0.8	3.2	-0.1	36500	1.2	6.3
31/03/2017	59843	1.1	3.2	59741	0.8	3.2	0.2	37031	1.5	6.9
30/06/2017	60515	1.1	3.5	60198	0.8	3.2	0.5	37481	1.2	5.6
30/09/2017	61027	0.8	3.4	60656	0.8	3.1	0.6	37833	0.9	4.9
31/12/2017	61534	0.8	3.9	61119	0.8	3.1	0.7	38323	1.3	5.0
31/03/2018	62011	0.8	3.6	61585	0.8	3.1	0.7	38640	0.8	4.3
30/06/2018	62744	1.2	3.7	62042	0.7	3.1	1.1	39099	1.2	4.3
30/09/2018	62898	0.2	3.1	62481	0.7	3.0	0.7	39543	1.1	4.5
31/12/2018	63571	1.1	3.3	62910	0.7	2.9	1.1	39942	1.0	4.2
31/03/2019	63875	0.5	3.0	63335	0.7	2.8	0.9	40401	1.1	4.6
30/06/2019	64163	0.5	2.3	63724	0.6	2.7	0.7	40556	0.4	3.7
30/09/2019	64608	0.7	2.7	64085	0.6	2.6	0.8	40894	0.8	3.4
31/12/2019	64683	0.1	1.7	64407	0.5	2.4	0.4	41049	0.4	2.8
31/03/2020	63911	-1.2	0.1	64673	0.4	2.1	-1.2	40969	-0.2	1.4
30/06/2020	56860	-11.0	-11.4	58055	-10.2	-8.9	-2.1	36097	-11.9	-11.0
30/09/2020	64746	13.9	0.2	63832	9.9	-0.4	1.4	41217	14.2	0.8
31/12/2020	64116	-1.0	-0.9	64043	0.3	-0.6	0.1	41647	1.0	1.5
31/03/2021	63700	-0.6	-0.3	64400	0.5	-0.5	-1.0	41400	-0.5	1.1
30/06/2021	64400	1.0	13.2	64700	0.5	11.4	-0.5	41500	0.2	15.0
30/09/2021	64800	0.6	0.0	65000	0.5	1.9	-0.4	41600	0.3	1.0
31/12/2021	65300	0.8	1.8	65400	0.5	2.1	-0.2	41800	0.4	0.4
31/03/2022	65900	0.9	3.4	65700	0.5	2.1	0.3	42200	0.9	1.8
30/06/2022	66500	1.0	3.4	66000	0.5	2.0	0.8	42600	1.1	2.7
30/09/2022	67300	1.1	3.9	66300	0.5	2.0	1.5	43000	0.9	3.3
31/12/2022	67600	0.5	3.6	66600	0.5	1.9	1.5	43200	0.4	3.4
31/03/2023	67900	0.4	3.0	67000	0.5	1.9	1.4	43400	0.4	2.8
30/06/2023	68100	0.3	2.3	67300	0.5	1.9	1.2	43600	0.5	2.3
30/09/2023	68500	0.7	1.8	67600	0.5	1.9	1.4	44000	0.8	2.1
31/12/2023	68900	0.5	1.8	67900	0.5	2.0	1.4	44100	0.4	2.1
31/03/2024	69100	0.4	1.8	68300	0.5	2.0	1.3	44400	0.6	2.3
30/06/2024	69300	0.3	1.8	68600	0.5	2.0	1.0	44500	0.3	2.0

projections and further context.

Business investment			Residential investment			Government spending (including non-market investment)			Export volumes		
Stats NZ, RBNZ estimates			Stats NZ, RBNZ estimates			Stats NZ, RBNZ estimates			Stats NZ, RBNZ estimates		
Seasonally adjusted			Seasonally adjusted			Seasonally adjusted			Seasonally adjusted		
\$09/10 millions	Quarterly % change	Annual % change	\$09/10 millions	Quarterly % change	Annual % change	\$09/10 millions	Quarterly % change	Annual % change	\$09/10 millions	Quarterly % change	Annual % change
ik	ikqpc	ikapc	ih	ihqpc	ihapc	g	gqpc	gapc	x	xqpc	xapc
3667	1.8	4.6	2903	20.1	38.1	8125	-8.1	2.4	10818	2.6	8.8
3982	8.6	14.5	2300	-20.8	1.3	7675	-5.5	-1.1	10819	0.0	12.3
4340	9.0	20.6	2324	1.0	-3.0	7703	0.4	-1.0	10672	-1.4	4.4
4366	0.6	21.2	2006	-13.7	-17.0	7844	1.8	-11.3	11119	4.2	5.5
3785	-13.3	3.2	1996	-0.5	-31.2	7979	1.7	-1.8	11142	0.2	3.0
4239	12.0	6.4	2090	4.7	-9.1	8338	4.5	8.6	11236	0.8	3.9
4083	-3.7	-5.9	2035	-2.6	-12.4	8484	1.8	10.1	11390	1.4	6.7
4123	1.0	-5.6	2431	19.5	21.2	8602	1.4	9.7	11099	-2.6	-0.2
4491	8.9	18.6	2266	-6.8	13.5	8704	1.2	9.1	11509	3.7	3.3
3860	-14.0	-8.9	2428	7.1	16.2	8948	2.8	7.3	11982	4.1	6.6
3983	3.2	-2.5	2757	13.6	35.5	8962	0.2	5.6	12075	0.8	6.0
4223	6.0	2.4	2775	0.7	14.2	8964	0.0	4.2	12411	2.8	11.8
4021	-4.8	-10.5	2930	5.6	29.3	8984	0.2	3.2	12175	-1.9	5.8
4426	10.1	14.7	3024	3.2	24.5	9099	1.3	1.7	12039	-1.1	0.5
4601	4.0	15.5	3159	4.5	14.6	9171	0.8	2.3	12378	2.8	2.5
4991	8.5	18.2	3141	-0.6	13.2	9287	1.3	3.6	12512	1.1	0.8
5658	13.4	40.7	3141	0.0	7.2	9418	1.4	4.8	12979	3.7	6.6
5455	-3.6	23.2	3355	6.8	10.9	9552	1.4	5.0	13315	2.6	10.6
5644	3.5	22.7	3180	-5.2	0.7	9663	1.2	5.4	12440	-6.6	0.5
5357	-5.1	7.3	3067	-3.6	-2.4	9968	3.2	7.3	12861	3.4	2.8
5434	1.4	-4.0	3153	2.8	0.4	9867	-1.0	4.8	12869	0.1	-0.8
5835	7.4	7.0	3103	-1.6	-7.5	10513	6.6	10.1	12826	-0.3	-3.7
6184	6.0	9.6	2961	-4.6	-6.9	10468	-0.4	8.3	12798	-0.2	2.9
6182	0.0	15.4	3017	1.9	-1.6	10513	0.4	5.5	12847	0.4	-0.1
5941	-3.9	9.3	3045	0.9	-3.4	10600	0.8	7.4	12822	-0.2	-0.4
5621	-5.4	-3.7	2887	-5.2	-7.0	10602	0.0	0.8	12990	1.3	1.3
6101	8.5	-1.3	3007	4.2	1.6	10663	0.6	1.9	13307	2.4	4.0
6049	-0.9	-2.1	3072	2.2	1.8	10727	0.6	2.0	13154	-1.1	2.4
6436	6.4	8.3	3028	-1.4	-0.6	10768	0.4	1.6	13620	3.5	6.2
6317	-1.8	12.4	3095	2.2	7.2	11099	3.1	4.7	13430	-1.4	3.4
6765	7.1	10.9	3138	1.4	4.4	11130	0.3	4.4	13623	1.4	2.4
6820	0.8	12.7	3127	-0.4	1.8	11378	2.2	6.1	14129	3.7	7.4
6901	1.2	7.2	2849	-8.9	-5.9	11401	0.2	5.9	13964	-1.2	2.5
7156	3.7	13.3	2635	-7.5	-14.9	11544	1.3	4.0	13679	-2.0	1.9
6237	-12.8	-7.8	2517	-4.5	-19.8	11860	2.7	6.6	13244	-3.2	-2.8
5857	-6.1	-14.1	2233	-11.3	-28.6	12233	3.1	7.5	13237	-0.1	-6.3
5375	-8.2	-22.1	2267	1.5	-20.4	12197	-0.3	7.0	13487	1.9	-3.4
5469	1.7	-23.6	2194	-3.2	-16.7	11957	-2.0	3.6	13814	2.4	1.0
5253	-3.9	-15.8	2168	-1.2	-13.9	11984	0.2	1.0	14002	1.4	5.7
4925	-6.2	-15.9	2284	5.4	2.3	12072	0.7	-1.3	13965	-0.3	5.5
5166	4.9	-3.9	2189	-4.2	-3.4	11972	-0.8	-1.8	14035	0.5	4.1
4945	-4.3	-9.6	2394	9.4	9.1	12198	1.9	2.0	14359	2.3	3.9
5357	8.3	2.0	2289	-4.4	5.6	12046	-1.2	0.5	14392	0.2	2.8

5820	8.6	18.2	2160	-5.6	-5.4	12123	0.6	0.4	14302	-0.6	2.4
6199	6.5	20.0	2167	0.3	-1.0	12196	0.6	1.9	14309	0.0	2.0
5941	-4.2	20.2	2146	-1.0	-10.4	12288	0.8	0.7	14610	2.1	1.7
6260	5.4	16.9	2276	6.1	-0.6	11923	-3.0	-1.0	14612	0.0	1.5
6535	4.4	12.3	2415	6.1	11.8	11990	0.6	-1.1	15028	2.8	5.1
6994	7.0	12.8	2422	0.3	11.8	11872	-1.0	-2.7	14404	-4.2	0.7
6810	-2.6	14.6	2520	4.0	17.4	11944	0.6	-2.8	14763	2.5	1.0
6423	-5.7	2.6	2608	3.5	14.6	12000	0.5	0.6	15338	3.9	5.0
6521	1.5	-0.2	2815	7.9	16.6	12016	0.1	0.2	15146	-1.3	0.8
6542	0.3	-6.5	2952	4.9	21.9	12172	1.3	2.5	15210	0.4	5.6
6785	3.7	-0.4	3011	2.0	19.5	12224	0.4	2.3	14897	-2.1	0.9
7235	6.6	12.6	3077	2.2	18.0	12233	0.1	1.9	14878	-0.1	-3.0
7411	2.4	13.7	3171	3.1	12.6	12191	-0.3	1.5	15182	2.0	0.2
7574	2.2	15.8	3289	3.7	11.4	12259	0.6	0.7	15534	2.3	2.1
7710	1.8	13.6	3351	1.9	11.3	12420	1.3	1.6	15165	-2.4	1.8
8144	5.6	12.6	3382	0.9	9.9	12586	1.3	2.9	15206	0.3	2.2
8087	-0.7	9.1	3398	0.5	7.2	12702	0.9	4.2	16322	7.3	7.5
7856	-2.9	3.7	3454	1.6	5.0	12755	0.4	4.0	16666	2.1	7.3
7875	0.2	2.1	3466	0.3	3.4	13144	3.0	5.8	16470	-1.2	8.6
8391	6.5	3.0	3583	3.4	5.9	12956	-1.4	2.9	16910	2.7	11.2
8016	-4.5	-0.9	3658	2.1	7.7	12900	-0.4	1.6	17094	1.1	4.7
8022	0.1	2.1	3837	4.9	11.1	13053	1.2	2.3	17078	-0.1	2.5
7985	-0.5	1.4	4012	4.6	15.8	13103	0.4	-0.3	17390	1.8	5.6
8196	2.6	-2.3	3972	-1.0	10.9	13164	0.5	1.6	17333	-0.3	2.5
8125	-0.9	1.4	3949	-0.6	8.0	13272	0.8	2.9	16917	-2.4	-1.0
8125	0.0	1.3	3888	-1.5	1.3	13478	1.6	3.3	17072	0.9	0.0
8426	3.7	5.5	3835	-1.4	-4.4	13593	0.9	3.7	17571	2.9	1.0
8502	0.9	3.7	3916	2.1	-1.4	14130	3.9	7.3	17851	1.6	3.0
9063	6.6	11.5	3901	-0.4	-1.2	14088	-0.3	6.2	17910	0.3	5.9
9464	4.4	16.5	3889	-0.3	0.0	14131	0.3	4.8	17832	-0.4	4.5
9579	1.2	13.7	3918	0.7	2.2	14257	0.9	4.9	18068	1.3	2.8
9483	-1.0	11.5	3941	0.6	0.6	14240	-0.1	0.8	18185	0.6	1.9
9654	1.8	6.5	3983	1.1	2.1	14405	1.2	2.2	18321	0.7	2.3
10085	4.5	6.6	4160	4.4	7.0	14381	-0.2	1.8	18857	2.9	5.7
9883	-2.0	3.2	4120	-1.0	5.2	14666	2.0	2.9	18622	-1.2	3.1
9986	1.0	5.3	4093	-0.7	3.9	14898	1.6	4.6	18224	-2.1	0.2
9877	-1.1	2.3	4137	1.1	3.9	15250	2.4	5.9	18339	0.6	0.1
9522	-3.6	-5.6	3886	-6.1	-6.6	15431	1.2	7.3	18064	-1.5	-4.2
7697	-19.2	-22.1	3104	-20.1	-24.7	14999	-2.8	2.3	15238	-15.6	-18.2
9292	20.7	-7.0	4356	40.3	6.4	15753	5.0	5.7	15958	4.7	-12.4
9107	-2.0	-7.8	4438	1.9	7.3	15849	0.6	3.9	15787	-1.1	-13.9
9660	6.1	1.5	4460	0.5	14.8	16000	1.0	3.8	15600	-1.4	-13.8
9450	-2.2	22.8	4480	0.5	44.4	16200	1.0	7.8	15700	0.7	2.9
9470	0.3	2.0	4450	-0.8	2.1	16500	2.0	4.7	16000	2.0	0.2
9610	1.5	5.6	4430	-0.4	-0.2	16700	1.5	5.5	16300	1.8	3.1
9700	0.9	0.4	4340	-1.9	-2.6	16900	1.3	5.8	16700	2.3	7.0
9830	1.4	4.1	4300	-1.0	-4.1	17100	0.8	5.6	17000	2.3	8.7
10000	1.7	5.6	4270	-0.5	-3.9	17100	0.2	3.8	17600	3.2	10.0
10300	2.6	6.8	4280	0.2	-3.3	17100	0.2	2.4	18100	2.8	11.0
10400	1.1	6.9	4280	-0.1	-1.4	17200	0.1	1.3	18200	0.8	9.4
10500	0.9	6.5	4280	-0.1	-0.5	17200	0.0	0.5	18400	0.8	7.8
10500	0.1	4.8	4310	0.7	0.8	17200	0.4	0.7	18600	1.0	5.5
10800	2.6	4.8	4360	1.1	1.7	17300	0.4	0.9	18700	0.6	3.3
10800	0.2	3.9	4430	1.6	3.4	17400	0.4	1.2	18700	0.3	2.7
10800	0.2	3.2	4460	0.8	4.3	17400	0.4	1.5	18800	0.5	2.5

Import volumes			Change in inventories		Gross domestic product (expenditure)			Nominal gross domestic product (expenditure)			Export prices (world terms)	
Stats NZ, RBNZ estimates			Stats NZ, RBNZ estimates		Stats NZ, RBNZ estimates			Stats NZ, RBNZ estimates			Stats NZ, RBNZ estimates	
Seasonally adjusted			Seasonally adjusted		Seasonally adjusted			Seasonally adjusted			Seasonally adjusted	
\$09/10 millions	Quarterly % change	Annual % change	\$09/10 millions	\$09/10 millions	Quarterly % change	Annual % change	\$millions	Quarterly % change	Annual % change	Index	Quarterly % change	
m	mqpc	mapc	stocks	gdpepx	gdpepxqpc	gdpepxapc	nomgdp	nomgdpqpc	nomgdpapc	px	pxqpc	
8772	-10.2	4.0	174	37623	2.6	6.3	29171	3.0	7.6	100.0	1.3	
8884	1.3	2.6	332	37209	-1.1	4.4	29166	0.0	5.6	101.0	1.0	
8921	0.4	0.4	199	37337	0.3	3.3	29601	1.5	5.4	103.0	2.0	
8888	-0.4	-9.0	201	37607	0.7	2.6	30433	2.8	7.5	105.3	2.2	
9018	1.5	2.8	352	37290	-0.8	-0.9	30567	0.4	4.8	110.1	4.5	
8900	-1.3	0.2	221	38455	3.1	3.3	31630	3.5	8.4	109.3	-0.7	
9111	2.4	2.1	155	38376	-0.2	2.8	31507	-0.4	6.4	108.7	-0.6	
9239	1.4	3.9	195	38949	1.5	3.6	32546	3.3	6.9	106.7	-1.8	
10038	8.6	11.3	598	39423	1.2	5.7	32981	1.3	7.9	110.2	3.2	
9465	-5.7	6.3	-47	39772	0.9	3.4	32957	-0.1	4.2	110.8	0.5	
9983	5.5	9.6	322	40397	1.6	5.3	33742	2.4	7.1	108.5	-2.1	
10339	3.6	11.9	490	41308	2.3	6.1	33976	0.7	4.4	108.5	0.0	
10173	-1.6	1.3	281	41560	0.6	5.4	34503	1.6	4.6	115.9	6.8	
10638	4.6	12.4	429	41631	0.2	4.7	34961	1.3	6.1	115.9	0.1	
10924	2.7	9.4	200	42223	1.4	4.5	35719	2.2	5.9	116.8	0.8	
11462	4.9	10.9	270	42844	1.5	3.7	36451	2.0	7.3	118.1	1.1	
12280	7.1	20.7	359	43790	2.2	5.4	37372	2.5	8.3	123.1	4.2	
12499	1.8	17.5	292	43910	0.3	5.5	38058	1.8	8.9	124.4	1.0	
12641	1.1	15.7	372	43975	0.1	4.1	38646	1.5	8.2	128.1	3.0	
13079	3.5	14.1	462	44042	0.2	2.8	38899	0.7	6.7	130.0	1.5	
13084	0.0	6.5	540	44137	0.2	0.8	38983	0.2	4.3	132.0	1.5	
13537	3.5	8.3	467	45303	2.6	3.2	40281	3.3	5.8	133.7	1.3	
13731	1.4	8.6	497	45366	0.1	3.2	40785	1.3	5.5	134.2	0.4	
13301	-3.1	1.7	-143	45423	0.1	3.1	40673	-0.3	4.6	136.1	1.4	
13211	-0.7	1.0	236	45883	1.0	4.0	41170	1.2	5.6	131.6	-3.3	
12934	-2.1	-4.5	126	45697	-0.4	0.9	41769	1.5	3.7	129.7	-1.5	
13051	0.9	-5.0	-368	46552	1.9	2.6	42275	1.2	3.7	131.9	1.7	
13181	1.0	-0.9	9	46949	0.9	3.4	43680	3.3	7.4	134.2	1.8	
13762	4.4	4.2	-68	47295	0.7	3.1	44168	1.1	7.3	135.5	0.9	
14112	2.5	9.1	316	47913	1.3	4.8	45238	2.4	8.3	141.4	4.3	
14365	1.8	10.1	255	48445	1.1	4.1	46595	3.0	10.2	143.4	1.4	
14929	3.9	13.3	328	48665	0.5	3.7	47170	1.2	8.0	152.3	6.2	
15276	2.3	11.0	277	48414	-0.5	2.4	47572	0.9	7.7	157.0	3.1	
15807	3.5	12.0	691	47673	-1.5	-0.5	47472	-0.2	4.9	157.2	0.1	
14649	-7.3	2.0	539	47683	0.0	-1.6	46897	-1.2	0.6	159.1	1.2	
13502	-7.8	-9.6	-118	47674	0.0	-2.0	47486	1.3	0.7	146.6	-7.9	
12595	-6.7	-17.6	-537	47337	-0.7	-2.2	47486	0.0	-0.2	129.2	-11.9	
12369	-1.8	-21.7	-1012	47938	1.3	0.6	47514	0.1	0.1	126.6	-2.0	
12447	0.6	-15.0	-739	48246	0.6	1.2	48311	1.7	3.0	131.7	4.0	
13132	5.5	-2.7	382	48780	1.1	2.3	48650	0.7	2.5	132.2	0.4	
13379	1.9	6.2	509	49292	1.0	4.1	49767	2.3	4.8	140.0	5.9	
13626	1.8	10.2	370	49576	0.6	3.4	50071	0.6	5.4	145.3	3.8	
13941	2.3	12.0	-137	48882	-1.4	1.3	50420	0.7	4.4	143.6	-1.2	

15051	8.0	14.6	242	48380	-1.0	-0.8	51168	1.5	5.2	148.7	3.5
14553	-3.3	8.8	-24	49208	1.7	-0.2	51619	0.9	3.7	152.7	2.7
15016	3.2	10.2	324	49621	0.8	0.1	52443	1.6	4.7	159.6	4.5
15225	1.4	9.2	421	50195	1.2	2.7	53309	1.7	5.7	160.8	0.8
15145	-0.5	0.6	-127	50655	0.9	4.7	53639	0.6	4.8	155.8	-3.1
15603	3.0	7.2	493	50717	0.1	3.1	53605	-0.1	3.8	158.7	1.9
15146	-2.9	0.9	-78	51060	0.7	2.9	54425	1.5	3.8	155.1	-2.3
15383	1.6	1.0	146	51310	0.5	2.2	53915	-0.9	1.1	151.6	-2.2
15476	0.6	2.2	281	51866	1.1	2.4	54005	0.2	0.7	150.0	-1.1
15802	2.1	1.3	180	52197	0.6	2.9	55156	2.1	2.9	156.0	4.0
16036	1.5	5.9	-458	52070	-0.2	2.0	55738	1.1	2.4	158.1	1.4
16800	4.8	9.2	586	52519	0.9	2.4	57574	3.3	6.8	166.6	5.4
16816	0.1	8.7	59	52808	0.6	1.8	59562	3.5	10.3	178.6	7.2
17172	2.1	8.7	-40	53369	1.1	2.2	59781	0.4	8.4	183.5	2.7
17565	2.3	9.5	505	53674	0.6	3.1	59956	0.3	7.6	178.5	-2.7
17800	1.3	6.0	479	54346	1.3	3.5	60338	0.6	4.8	172.2	-3.5
18217	2.3	8.3	264	55072	1.3	4.3	60813	0.8	2.1	163.2	-5.3
18417	1.1	7.3	84	55423	0.6	3.8	61538	1.2	2.9	162.1	-0.6
18667	1.4	6.3	213	55949	0.9	4.2	62887	2.2	4.9	158.9	-2.0
18328	-1.8	3.0	-10	56837	1.6	4.6	63515	1.0	5.3	152.0	-4.4
18389	0.3	0.9	149	57400	1.0	4.2	63666	0.2	4.7	148.9	-2.1
18504	0.6	0.5	301	58042	1.1	4.7	65261	2.5	6.0	149.8	0.6
19009	2.7	1.8	-125	58646	1.0	4.8	66274	1.6	5.4	151.5	1.2
19430	2.2	6.0	7	59020	0.6	3.8	67078	1.2	5.6	156.3	3.2
19652	1.1	6.9	434	59342	0.5	3.4	68205	1.7	7.1	162.3	3.8
19912	1.3	7.6	523	59911	1.0	3.2	69823	2.4	7.0	167.9	3.4
20175	1.3	6.1	310	60804	1.5	3.7	70631	1.2	6.6	169.3	0.8
20632	2.3	6.2	-8	61509	1.2	4.2	72358	2.4	7.9	168.3	-0.6
21445	3.9	9.1	291	62239	1.2	4.9	73912	2.1	8.4	169.3	0.6
21811	1.7	9.5	834	62765	0.8	4.8	74281	0.5	6.4	166.7	-1.5
21952	0.6	8.8	635	63645	1.4	4.7	75505	1.6	6.9	169.0	1.4
21847	-0.5	5.9	466	63966	0.5	4.0	76241	1.0	5.4	170.3	0.8
21866	0.1	2.0	170	64686	1.1	3.9	76775	0.7	3.9	169.2	-0.6
22073	0.9	1.2	-40	65242	0.9	3.9	78190	1.8	5.3	166.7	-1.5
22127	0.2	0.8	-181	65480	0.4	2.9	79055	1.1	4.7	169.2	1.5
22517	1.8	3.1	424	65879	0.6	3.0	80335	1.6	5.4	169.1	0.0
22651	0.6	3.6	16	66117	0.4	2.2	81288	1.2	5.9	171.4	1.3
21352	-5.7	-3.3	-337	65381	-1.1	0.2	81268	0.0	3.9	171.6	0.2
16097	-24.6	-27.3	-871	59437	-9.1	-9.2	73661	-9.4	-6.8	169.4	-1.3
17845	10.9	-20.7	-292	67946	14.3	3.1	84224	14.3	4.8	167.5	-1.2
19471	9.1	-14.0	-185	66927	-1.5	1.2	82881	-1.6	2.0	166.8	-0.4
20500	5.3	-3.9	-186	66200	-1.1	1.3	82500	-0.4	1.6	172.0	3.2
20600	0.4	27.9	385	66900	1.0	12.5	84300	2.1	14.4	178.0	3.4
20800	1.1	16.6	278	67300	0.6	-1.0	85300	1.3	1.3	180.0	0.9
21100	1.2	8.2	229	67800	0.8	1.3	86400	1.2	4.2	180.0	0.2
21400	1.6	4.4	208	68400	0.9	3.3	87300	1.0	5.7	178.0	-1.2
21800	1.9	6.0	198	69000	0.9	3.3	88300	1.2	4.7	176.0	-0.8
22200	1.6	6.6	194	69800	1.1	3.7	89500	1.4	4.9	175.0	-0.6
22800	2.8	8.3	192	70100	0.5	3.5	90300	0.9	4.6	175.0	-0.4
23000	0.9	7.5	191	70400	0.3	2.9	91000	0.8	4.3	175.0	-0.1
23300	1.2	6.7	190	70600	0.3	2.2	91700	0.7	3.9	174.0	0.0
23500	0.8	5.8	190	71000	0.6	1.8	92700	1.2	3.6	175.0	0.1
23800	1.4	4.4	190	71400	0.5	1.8	93700	1.0	3.7	175.0	0.2
24000	0.8	4.3	190	71600	0.4	1.8	94600	0.9	3.9	175.0	0.2
24200	0.7	3.8	190	71800	0.3	1.8	95300	0.8	4.0	176.0	0.3

Notes Detailed	Import prices (world terms, SNA)				Terms of trade (SNA)				Current account balance			Net foreign liabilities		
	Stats NZ, RBNZ estimates				Stats NZ, RBNZ estimates				Stats NZ, RBNZ estimates			Stats NZ, RBNZ estimates		
	Seasonally adjusted				Seasonally adjusted				Seasonally adjusted			Seasonally adjusted		
	Annual % change pxapc	Index pm	Quarterly % change pmqpc	Annual % change pmapc	Index tot	Quarterly % change totqpc	Annual % change totapc	\$millions ca	% quarterly GDP caqgdp	Annual, % of annual GDP caagdp	\$millions nfl	% annual GDP nflgdp	000s emp	
	-0.1	100.0	6.5	2.6	100.0	-4.9	-2.6	-1338	-4.6	-5.2	88151	77.9	1784	
	-1.9	100.6	0.6	1.6	100.4	0.4	-3.5	-931	-3.2	-5.0	90897	79.2	1784	
	1.0	99.1	-1.4	2.9	103.9	3.5	-1.8	-947	-3.2	-4.6	93239	80.2	1806	
	6.7	101.0	1.9	7.6	104.2	0.3	-0.9	-622	-2.0	-3.3	93009	78.6	1822	
	10.1	103.0	1.9	3.0	106.9	2.5	6.9	-312	-1.0	-2.4	89481	74.7	1824	
	8.3	102.6	-0.4	2.0	106.6	-0.3	6.1	44	0.1	-1.5	90589	74.1	1841	
	5.5	101.2	-1.4	2.1	107.4	0.8	3.4	-99	-0.3	-0.8	89765	72.3	1845	
	1.3	99.4	-1.8	-1.7	107.4	0.0	3.0	-659	-2.0	-0.8	79161	62.7	1868	
	0.1	103.8	4.4	0.8	106.2	-1.2	-0.7	-1091	-3.3	-1.4	85927	66.8	1893	
	1.3	104.8	1.0	2.2	105.6	-0.5	-0.9	-306	-0.9	-1.6	84834	65.3	1905	
	-0.2	102.2	-2.5	1.1	106.1	0.4	-1.3	-719	-2.1	-2.1	85730	64.8	1903	
	1.7	103.3	1.0	3.9	105.1	-1.0	-2.2	-789	-2.3	-2.2	87949	65.8	1918	
	5.2	108.6	5.2	4.6	106.7	1.6	0.5	-725	-2.1	-1.9	90728	67.1	1926	
	4.7	104.5	-3.8	-0.3	110.9	4.0	5.0	-1063	-3.0	-2.4	92929	67.7	1942	
	7.7	104.8	0.3	2.5	111.5	0.5	5.1	-779	-2.2	-2.4	94116	67.6	1971	
	8.9	104.2	-0.6	0.9	113.4	1.7	7.9	-892	-2.4	-2.4	95349	67.3	1973	
	6.2	107.2	2.9	-1.3	114.8	1.3	7.6	-1349	-3.6	-2.8	101641	70.3	1991	
	7.3	106.1	-1.0	1.5	117.2	2.1	5.7	-1202	-3.2	-2.8	100274	67.9	2006	
	9.7	107.7	1.5	2.7	119.0	1.5	6.7	-2289	-5.9	-3.8	105452	70.1	2030	
	10.1	111.1	3.2	6.6	117.0	-1.6	3.2	-2144	-5.5	-4.6	110250	72.1	2064	
	7.2	112.6	1.3	5.1	117.2	0.2	2.1	-2309	-5.9	-5.1	111675	72.2	2061	
	7.5	113.0	0.3	6.5	118.3	1.0	0.9	-2871	-7.1	-6.1	112686	71.9	2071	
	4.7	112.9	0.0	4.8	118.9	0.4	-0.1	-3105	-7.6	-6.5	116090	73.0	2098	
	4.7	117.5	4.0	5.7	115.9	-2.5	-1.0	-3092	-7.6	-7.1	119198	74.2	2099	
	-0.3	116.0	-1.2	3.0	113.4	-2.1	-3.2	-3671	-8.9	-7.8	119212	73.2	2120	
	-3.0	113.1	-2.5	0.2	114.6	1.1	-3.1	-2718	-6.5	-7.7	120374	73.2	2140	
	-1.8	115.2	1.9	2.0	114.4	-0.2	-3.7	-2668	-6.3	-7.3	123674	74.6	2133	
	-1.4	116.0	0.7	-1.2	115.7	1.1	-0.2	-3010	-6.9	-7.2	129235	76.5	2133	
	2.9	117.3	1.1	1.1	115.5	-0.1	1.8	-3225	-7.3	-6.8	130672	76.0	2158	
	9.0	117.8	0.5	4.2	120.0	3.9	4.7	-3282	-7.3	-6.9	134730	76.8	2169	
	8.7	116.7	-1.0	1.2	122.9	2.4	7.4	-3260	-7.0	-7.1	134903	75.1	2165	
	13.5	119.1	2.0	2.6	127.9	4.1	10.6	-2688	-5.7	-6.8	134939	73.7	2179	
	15.9	122.2	2.7	4.2	128.4	0.4	11.2	-3192	-6.7	-6.7	139312	74.7	2182	
	11.2	123.2	0.7	4.5	127.7	-0.6	6.4	-4262	-9.0	-7.1	143626	76.1	2180	
	11.0	128.1	4.0	9.8	124.1	-2.8	1.0	-3914	-8.3	-7.4	150931	79.8	2181	
	-3.8	121.9	-4.9	2.4	120.3	-3.1	-6.0	-3189	-6.7	-7.7	154940	81.8	2194	
	-17.7	110.1	-9.7	-9.9	117.3	-2.4	-8.6	-1941	-4.1	-7.0	160901	85.0	2154	
	-19.5	111.7	1.5	-9.3	113.4	-3.4	-11.2	-314	-0.7	-5.0	157312	83.1	2155	
	-17.2	114.3	2.4	-10.8	115.2	1.6	-7.2	340	0.7	-2.7	154963	81.2	2135	
	-9.8	113.2	-1.0	-7.1	116.7	1.4	-2.9	-2436	-5.0	-2.3	153415	79.9	2137	
	8.4	114.9	1.4	4.3	121.9	4.4	3.9	-491	-1.0	-1.5	153641	79.1	2144	
	14.8	116.4	1.3	4.2	124.9	2.5	10.2	-890	-1.8	-1.8	154982	78.8	2148	
	9.1	116.5	0.1	1.9	123.3	-1.3	7.0	-981	-1.9	-2.4	145032	72.9	2166	

12.5	115.7	-0.7	2.2	128.5	4.2	10.1	-2157	-4.2	-2.2	142600	70.8	2158
9.0	120.0	3.7	4.5	127.2	-1.0	4.3	-1644	-3.2	-2.8	127253	62.6	2177
9.8	123.3	2.7	6.0	129.4	1.7	3.6	-1250	-2.4	-2.9	130748	63.6	2186
11.9	125.0	1.4	7.3	128.6	-0.6	4.3	-1719	-3.2	-3.3	139751	67.0	2188
4.8	121.7	-2.6	5.2	127.9	-0.5	-0.5	-1304	-2.4	-2.8	142681	67.6	2189
4.0	126.1	3.6	5.0	125.9	-1.6	-1.0	-2492	-4.6	-3.2	143640	67.4	2191
-2.8	125.8	-0.3	2.0	123.3	-2.0	-4.7	-2233	-4.1	-3.6	145452	67.7	2194
-5.7	125.3	-0.4	0.2	121.0	-1.9	-5.9	-1774	-3.3	-3.6	145070	67.3	2184
-3.7	124.1	-1.0	1.9	120.9	0.0	-5.5	-1978	-3.7	-3.9	149146	69.1	2189
-1.8	125.1	0.8	-0.8	124.7	3.1	-0.9	-1965	-3.6	-3.7	148461	68.3	2193
2.0	124.7	-0.3	-0.9	126.8	1.7	2.9	-2148	-3.9	-3.6	149180	68.2	2205
9.9	125.1	0.3	-0.2	133.2	5.0	10.1	-2067	-3.6	-3.7	146196	65.7	2239
19.1	124.3	-0.6	0.2	143.7	7.9	18.8	-859	-1.4	-3.1	144733	63.5	2258
17.6	127.9	2.9	2.3	143.4	-0.2	15.0	-787	-1.3	-2.6	151540	65.1	2281
12.9	128.1	0.1	2.7	139.4	-2.8	9.9	-2166	-3.6	-2.5	151271	63.9	2290
3.3	125.0	-2.4	0.0	137.7	-1.2	3.4	-2271	-3.8	-2.5	150061	62.6	2315
-8.6	122.2	-2.2	-1.6	133.5	-3.1	-7.1	-2281	-3.8	-3.1	154773	64.3	2346
-11.6	120.3	-1.6	-6.0	134.8	1.0	-6.0	-1706	-2.8	-3.5	151171	62.3	2364
-11.0	117.4	-2.3	-8.3	135.3	0.4	-2.9	-2111	-3.4	-3.4	145563	59.3	2366
-11.7	114.7	-2.3	-8.3	132.5	-2.1	-3.8	-1328	-2.1	-3.0	148372	59.6	2357
-8.8	115.9	1.1	-5.2	128.4	-3.1	-3.8	-1805	-2.8	-2.8	149508	59.4	2387
-7.6	112.7	-2.7	-6.3	132.9	3.5	-1.4	-1137	-1.7	-2.5	156122	61.1	2417
-4.7	114.5	1.6	-2.5	132.3	-0.4	-2.2	-1402	-2.1	-2.2	159748	61.7	2479
2.9	116.3	1.6	1.4	134.4	1.6	1.4	-1862	-2.8	-2.4	162150	61.8	2504
9.1	116.9	0.5	0.9	138.8	3.3	8.1	-1509	-2.2	-2.2	153860	57.7	2530
12.1	122.4	4.7	8.6	137.1	-1.2	3.2	-2622	-3.8	-2.7	148677	54.8	2559
11.7	121.2	-1.0	5.8	139.7	1.9	5.5	-1740	-2.5	-2.8	149894	54.4	2557
7.7	117.1	-3.4	0.6	143.8	3.0	7.0	-1830	-2.5	-2.7	147208	52.4	2606
4.3	116.8	-0.2	-0.1	144.9	0.8	4.4	-2237	-3.0	-2.9	150022	52.3	2623
-0.7	119.9	2.6	-2.1	139.1	-4.0	1.4	-3416	-4.6	-3.2	150736	51.8	2634
-0.2	119.9	0.0	-1.1	140.9	1.3	0.9	-3194	-4.2	-3.6	153673	51.9	2652
1.2	121.5	1.4	3.8	140.1	-0.6	-2.5	-2800	-3.7	-3.9	154411	51.5	2678
0.0	123.3	1.5	5.6	137.2	-2.1	-5.3	-3191	-4.2	-4.2	170259	56.2	2681
0.0	123.4	0.1	3.0	135.1	-1.5	-2.8	-2900	-3.7	-3.9	165392	53.9	2673
0.1	122.3	-0.9	2.0	138.3	2.4	-1.8	-2745	-3.5	-3.8	167076	53.9	2690
-0.7	119.8	-2.0	-1.4	141.2	2.0	0.7	-2803	-3.5	-3.7	170744	54.3	2705
1.3	119.8	0.0	-2.9	143.1	1.3	4.3	-2092	-2.6	-3.3	171903	53.9	2714
2.9	121.2	1.2	-1.8	141.6	-1.0	4.8	-1315	-1.6	-2.8	180453	56.1	2742
0.1	121.7	0.5	-0.5	139.2	-1.7	0.6	533	0.7	-1.7	179806	56.8	2736
-1.0	119.0	-2.3	-0.7	140.8	1.1	-0.3	-492	-0.6	-1.0	175906	54.9	2718
-2.7	118.6	-0.4	-1.0	140.7	-0.1	-1.7	-2095	-2.5	-1.0	177800	55.2	2735
0.2	121.0	2.2	0.0	142.0	0.9	0.2	-3280	-4.0	-1.6	181000	56.0	2750
5.0	122.0	0.7	0.3	146.0	2.7	4.7	-2840	-3.4	-2.6	184000	55.0	2760
7.2	121.0	-0.8	1.8	148.0	1.7	5.3	-2400	-2.8	-3.2	186000	55.5	2760
7.9	121.0	-0.4	1.8	149.0	0.6	6.0	-2190	-2.5	-3.2	188000	55.6	2770
3.3	121.0	0.0	-0.5	147.0	-1.1	3.9	-2340	-2.7	-2.9	190000	55.5	2770
-0.9	121.0	0.0	-1.2	146.0	-0.8	0.3	-2530	-2.9	-2.7	193000	55.5	2780
-2.3	121.0	0.0	-0.4	145.0	-0.6	-1.9	-2480	-2.8	-2.7	195000	55.5	2790
-2.9	121.0	0.1	0.1	145.0	-0.4	-2.9	-2720	-3.0	-2.8	198000	55.7	2800
-1.8	121.0	0.1	0.2	144.0	-0.2	-2.0	-2940	-3.2	-3.0	201000	55.9	2810
-1.0	121.0	0.1	0.4	144.0	-0.2	-1.4	-3200	-3.5	-3.1	204000	56.2	2820
-0.4	121.0	0.1	0.5	144.0	0.0	-0.9	-3350	-3.6	-3.3	207000	56.6	2830
0.1	121.0	0.1	0.5	144.0	0.0	-0.4	-3650	-3.9	-3.6	211000	57.0	2840
0.5	121.0	0.1	0.5	144.0	0.1	0.0	-3870	-4.1	-3.8	214000	57.5	2850
0.8	122.0	0.1	0.5	145.0	0.2	0.3	-3990	-4.2	-3.9	218000	58.0	2860

Employment			Working age population			Labour force			Net immigration (working age)		Employment rate	Unemployment rate
Stats NZ, RBNZ estimates			Stats NZ, RBNZ estimates			Stats NZ, RBNZ estimates			Stats NZ, RBNZ estimates		Stats NZ, RBNZ estimates	Stats NZ, RBNZ estimates
Seasonally adjusted			Seasonally adjusted			Seasonally adjusted			Seasonally adjusted		Seasonally adjusted	Seasonally adjusted
Quarterly % change	Annual % change	000s	Quarterly % change	Annual % change	000s	Quarterly % change	Annual % change	000s, quarterly	000s, annual total	% working age population		% labour force
empqpc	empapc	wap	wapqpc	wapapc	lf	lfqpc	lfapc	mig	miga	emprate		urate
-0.1	1.8	2929	0.1	0.7	1907	-0.1	0.7	-2.3	-8.1	60.9		6.5
0.0	1.5	2935	0.2	0.8	1905	-0.1	0.4	-2.8	-8.8	60.8		6.3
1.2	2.3	2941	0.2	0.8	1920	0.8	1.2	-2.2	-8.8	61.4		6.0
0.9	2.0	2948	0.2	0.7	1934	0.7	1.3	-2.6	-10.0	61.8		5.8
0.1	2.2	2953	0.2	0.8	1931	-0.1	1.3	0.0	-7.6	61.8		5.5
0.9	3.2	2958	0.2	0.8	1946	0.8	2.2	4.6	-0.2	62.2		5.4
0.2	2.2	2969	0.4	1.0	1951	0.2	1.6	9.0	10.9	62.1		5.4
1.2	2.5	2983	0.5	1.2	1978	1.4	2.3	10.2	23.8	62.6		5.6
1.3	3.8	2998	0.5	1.5	2000	1.1	3.5	12.6	36.3	63.1		5.3
0.6	3.5	3015	0.6	1.9	2011	0.6	3.3	12.4	44.2	63.2		5.3
-0.1	3.1	3031	0.5	2.1	2016	0.2	3.3	12.8	48.0	62.8		5.5
0.8	2.7	3049	0.6	2.2	2018	0.1	2.1	10.9	48.7	62.9		5.1
0.4	1.7	3067	0.6	2.3	2027	0.4	1.4	10.9	47.0	62.8		5.0
0.8	1.9	3086	0.6	2.4	2040	0.6	1.4	9.3	43.8	62.9		4.8
1.5	3.6	3101	0.5	2.3	2062	1.1	2.3	6.9	37.9	63.6		4.5
0.1	2.9	3117	0.5	2.2	2070	0.4	2.5	5.0	32.0	63.3		4.7
0.9	3.4	3131	0.4	2.1	2079	0.4	2.6	3.6	24.8	63.6		4.3
0.8	3.3	3144	0.4	1.9	2094	0.7	2.7	2.2	17.7	63.8		4.2
1.2	3.0	3155	0.3	1.7	2111	0.8	2.4	1.8	12.7	64.3		3.9
1.7	4.6	3168	0.4	1.6	2145	1.6	3.6	2.0	9.7	65.2		3.7
-0.1	3.5	3182	0.4	1.6	2145	0.0	3.2	1.4	7.4	64.8		3.9
0.5	3.2	3193	0.3	1.6	2152	0.3	2.8	2.9	8.1	64.9		3.8
1.3	3.3	3204	0.3	1.6	2182	1.4	3.4	1.3	7.5	65.5		3.8
0.0	1.7	3216	0.4	1.5	2180	-0.1	1.7	2.2	7.8	65.3		3.7
1.0	2.9	3231	0.5	1.5	2210	1.4	3.0	3.3	9.7	65.6		4.1
0.9	3.3	3249	0.6	1.8	2222	0.6	3.3	2.3	9.1	65.9		3.7
-0.3	1.7	3258	0.3	1.7	2219	-0.2	1.7	2.4	10.3	65.5		3.9
0.0	1.6	3267	0.3	1.6	2215	-0.2	1.6	3.2	11.2	65.3		3.8
1.2	1.8	3279	0.4	1.5	2246	1.4	1.6	2.7	10.6	65.8		3.9
0.5	1.4	3286	0.2	1.1	2251	0.2	1.3	1.5	9.8	66.0		3.6
-0.2	1.5	3293	0.2	1.1	2246	-0.2	1.2	1.5	8.9	65.7		3.6
0.6	2.2	3298	0.2	0.9	2256	0.4	1.8	1.9	7.7	66.1		3.4
0.1	1.1	3314	0.5	1.1	2267	0.5	0.9	2.6	7.5	65.8		3.8
-0.1	0.5	3316	0.1	0.9	2265	-0.1	0.6	3.4	9.4	65.7		3.8
0.0	0.7	3323	0.2	0.9	2273	0.4	1.2	1.8	9.7	65.6		4.1
0.6	0.7	3329	0.2	0.9	2294	0.9	1.7	2.1	9.9	65.9		4.4
-1.8	-1.3	3339	0.3	0.8	2267	-1.2	0.0	3.7	11.0	64.5		5.0
0.0	-1.1	3351	0.4	1.1	2289	1.0	1.1	4.6	12.2	64.3		5.8
-0.9	-2.1	3361	0.3	1.1	2275	-0.6	0.1	3.3	13.7	63.5		6.2
0.1	-2.6	3373	0.4	1.3	2287	0.5	-0.3	2.7	14.3	63.4		6.6
0.3	-0.5	3380	0.2	1.2	2278	-0.4	0.5	1.1	11.8	63.4		5.9
0.2	-0.3	3393	0.4	1.3	2300	1.0	0.5	-0.4	6.8	63.3		6.6
0.8	1.5	3399	0.2	1.1	2305	0.2	1.3	-0.2	3.2	63.7		6.1

-0.4	1.0	3411	0.4	1.1	2302	-0.1	0.7	-0.8	-0.2	63.3	6.2
0.9	1.5	3413	0.1	1.0	2317	0.7	1.7	-2.9	-4.2	63.8	6.0
0.4	1.8	3425	0.4	0.9	2326	0.4	1.1	-3.0	-6.8	63.8	6.1
0.1	1.0	3426	0.0	0.8	2326	0.0	0.9	-2.4	-9.1	63.9	6.0
0.0	1.4	3436	0.3	0.7	2330	0.1	1.2	-3.3	-11.6	63.7	6.1
0.1	0.6	3437	0.0	0.7	2341	0.5	1.0	-2.6	-11.3	63.7	6.4
0.1	0.4	3448	0.3	0.7	2345	0.2	0.8	-2.3	-10.5	63.6	6.4
-0.5	-0.2	3450	0.1	0.7	2343	-0.1	0.7	-1.9	-10.0	63.3	6.7
0.2	0.0	3460	0.3	0.7	2336	-0.3	0.3	0.0	-6.7	63.3	6.3
0.2	0.1	3466	0.2	0.8	2329	-0.3	-0.5	1.5	-2.6	63.3	5.8
0.5	0.5	3478	0.3	0.9	2344	0.6	0.0	3.9	3.5	63.4	6.0
1.5	2.5	3490	0.3	1.2	2377	1.4	1.5	4.2	9.6	64.2	5.8
0.8	3.2	3506	0.5	1.3	2395	0.8	2.5	6.9	16.5	64.4	5.7
1.0	4.0	3523	0.5	1.6	2417	0.9	3.8	8.5	23.5	64.7	5.6
0.4	3.9	3542	0.5	1.8	2419	0.1	3.2	10.0	29.6	64.7	5.3
1.1	3.4	3565	0.6	2.1	2446	1.1	2.9	11.6	37.0	64.9	5.3
1.3	3.9	3583	0.5	2.2	2483	1.5	3.7	11.0	41.1	65.5	5.5
0.8	3.6	3607	0.7	2.4	2503	0.8	3.6	11.6	44.2	65.5	5.5
0.1	3.3	3627	0.6	2.4	2503	0.0	3.4	12.0	46.2	65.2	5.5
-0.4	1.8	3654	0.7	2.5	2499	-0.1	2.2	13.9	48.5	64.5	5.7
1.3	1.7	3674	0.5	2.5	2513	0.5	1.2	13.5	51.0	65.0	5.0
1.3	2.2	3700	0.7	2.6	2553	1.6	2.0	13.4	52.8	65.3	5.3
2.6	4.8	3732	0.9	2.9	2612	2.3	4.4	13.1	53.9	66.4	5.1
1.0	6.2	3757	0.7	2.8	2634	0.8	5.4	12.3	52.3	66.6	5.0
1.0	6.0	3775	0.5	2.7	2673	1.5	6.4	12.1	50.9	67.0	5.3
1.1	5.9	3797	0.6	2.6	2692	0.7	5.4	11.7	49.2	67.4	4.9
-0.1	3.1	3820	0.6	2.4	2685	-0.2	2.8	11.2	47.3	66.9	4.8
1.9	4.1	3841	0.5	2.2	2735	1.8	3.8	9.2	44.2	67.8	4.7
0.7	3.7	3856	0.4	2.1	2745	0.4	2.7	9.4	41.5	68.0	4.5
0.4	2.9	3876	0.5	2.1	2756	0.4	2.4	10.0	39.8	68.0	4.4
0.7	3.7	3905	0.7	2.2	2776	0.7	3.4	9.5	38.1	67.9	4.5
1.0	2.8	3922	0.4	2.1	2789	0.4	2.0	10.1	39.0	68.3	4.0
0.1	2.2	3949	0.7	2.4	2804	0.5	2.1	9.3	38.9	67.9	4.3
-0.3	1.5	3955	0.2	2.0	2788	-0.6	1.2	9.9	38.9	67.6	4.2
0.6	1.4	3973	0.5	1.7	2801	0.5	0.9	12.0	41.4	67.7	4.0
0.6	1.0	3993	0.5	1.8	2823	0.8	1.2	16.1	47.4	67.7	4.1
0.3	1.2	4017	0.6	1.7	2828	0.2	0.9	19.7	57.8	67.6	4.1
1.0	2.6	4052	0.9	2.5	2865	1.3	2.7	23.4	71.2	67.7	4.3
-0.2	1.7	4076	0.6	2.6	2849	-0.5	1.7	2.2	61.4	67.1	4.0
-0.7	0.5	4089	0.3	2.4	2870	0.7	1.7	0.1	45.4	66.5	5.2
0.6	0.8	4092	0.1	1.9	2873	0.1	1.6	0.0	25.7	66.8	4.9
0.5	0.3	4100	0.2	1.2	2886	0.5	0.8	0.0	2.3	67.1	4.7
0.2	0.7	4110	0.2	0.8	2890	0.2	1.5	0.2	0.3	67.1	4.7
0.2	1.6	4120	0.2	0.7	2900	0.2	0.9	0.5	0.7	67.1	4.7
0.2	1.2	4120	0.2	0.8	2900	0.2	1.1	0.8	1.5	67.1	4.7
0.2	0.9	4130	0.2	0.8	2910	0.2	0.8	1.4	2.9	67.1	4.7
0.3	0.9	4140	0.2	0.8	2920	0.2	0.8	2.0	4.7	67.1	4.6
0.3	1	4150	0.2	0.9	2920	0.2	0.9	2.6	6.8	67.2	4.6
0.3	1.1	4160	0.3	0.9	2930	0.3	0.9	3.6	9.6	67.2	4.6
0.3	1.2	4180	0.3	1	2940	0.3	1	4.6	12.8	67.2	4.5
0.3	1.2	4190	0.3	1.1	2950	0.3	1.1	5.2	16.0	67.2	4.5
0.3	1.3	4200	0.3	1.2	2960	0.3	1.2	5.6	19	67.3	4.4
0.4	1.4	4210	0.3	1.2	2970	0.3	1.2	5.74	21.1	67.3	4.4
0.4	1.4	4230	0.3	1.2	2980	0.3	1.2	5.86	22.4	67.3	4.4
0.4	1.4	4240	0.3	1.2	2980	0.3	1.2	5.97	23.2	67.4	4.3

Labour force participation rate		Labour cost index (private sector)				Quarterly employment survey average hourly earnings				CPI headline				CPI non-tradable	
Stats NZ, RBNZ estimates		Stats NZ, RBNZ estimates				Stats NZ, RBNZ estimates				Stats NZ, RBNZ estimates				Stats NZ, RBNZ estimates	
Seasonally adjusted		Not seasonally adjusted				Seasonally adjusted				Not seasonally adjusted				Not seasonally adjusted	
%		Index	Quarterly % change	Annual % change	Index	Quarterly % change	Annual % change	Index		Quarterly % change	Annual % change	Index	Quarterly % change	Index	Quarterly % change
lfprate		lci	lciqpc	lciapc	qeswage	qeswageapc	qeswageapc	p		pqpc	papc	pnt	pntqpc		
	65.1	793	0.4	1.4	16.6	0.7	1.9	687	0.7	1.8	583	0.8			
	64.9	796	0.3	1.3	16.7	0.3	1.7	692	0.7	2.0	587	0.7			
	65.3	799	0.4	1.4	16.8	0.7	1.3	702	1.4	3.0	594	1.3			
	65.6	803	0.4	1.5	16.9	0.7	2.5	710	1.2	4.0	598	0.7			
	65.4	806	0.4	1.6	17.1	1.4	3.2	708	-0.2	3.1	598	-0.1			
	65.8	810	0.5	1.9	17.2	0.7	3.5	715	0.9	3.2	599	0.3			
	65.7	815	0.6	2.0	17.3	0.5	3.3	719	0.6	2.4	603	0.7			
	66.3	820	0.5	2.1	17.4	0.6	3.3	723	0.6	1.8	607	0.7			
	66.7	823	0.5	2.1	17.6	0.8	2.6	727	0.6	2.6	615	1.2			
	66.7	827	0.5	2.1	17.5	-0.4	1.5	734	1.0	2.8	618	0.6			
	66.5	832	0.6	2.1	17.8	1.6	2.6	738	0.5	2.6	625	1.0			
	66.2	836	0.5	2.0	18.0	1.3	3.3	742	0.6	2.7	630	0.9			
	66.1	841	0.6	2.2	18.0	0.1	2.6	745	0.4	2.5	635	0.8			
	66.1	845	0.5	2.2	18.2	1.1	4.1	745	0.0	1.5	641	0.8			
	66.5	850	0.6	2.1	18.3	0.4	2.9	748	0.5	1.5	648	1.2			
	66.4	855	0.6	2.2	18.5	1.2	2.9	754	0.7	1.6	657	1.3			
	66.4	859	0.5	2.1	18.6	0.5	3.2	757	0.4	1.5	664	1.1			
	66.6	864	0.6	2.2	19.0	2.1	4.3	763	0.8	2.4	670	0.9			
	66.9	870	0.7	2.3	18.9	-0.4	3.5	767	0.6	2.5	677	1.0			
	67.7	876	0.7	2.5	18.9	-0.2	2.0	774	0.9	2.7	685	1.1			
	67.4	880	0.5	2.5	19.2	1.6	3.1	778	0.4	2.8	692	1.1			
	67.4	887	0.7	2.6	19.4	1.1	2.2	784	0.9	2.8	700	1.1			
	68.1	894	0.8	2.8	19.7	1.3	3.9	793	1.1	3.4	707	1.1			
	67.8	901	0.8	2.9	19.9	1.1	5.2	799	0.7	3.2	714	1.0			
	68.4	907	0.6	3.0	20.1	0.9	4.6	803	0.6	3.3	721	1.0			
	68.4	912	0.6	2.9	20.4	1.6	5.1	816	1.5	4.0	728	1.0			
	68.1	921	0.9	3.0	20.8	1.8	5.5	821	0.7	3.5	736	1.0			
	67.8	929	0.9	3.1	21.0	1.1	5.5	820	-0.2	2.6	741	0.8			
	68.5	934	0.6	3.0	21.2	0.9	5.5	824	0.5	2.5	750	1.2			
	68.5	942	0.8	3.2	21.3	0.5	4.4	832	1.0	2.0	758	1.1			
	68.2	950	0.9	3.2	21.5	1.2	3.8	836	0.5	1.8	763	0.6			
	68.4	960	1.1	3.4	21.8	1.4	4.1	846	1.2	3.2	768	0.7			
	68.4	967	0.7	3.5	22.1	1.3	4.4	852	0.7	3.4	776	1.1			
	68.3	974	0.8	3.4	22.5	1.7	5.7	865	1.6	4.0	784	0.9			
	68.4	985	1.1	3.7	22.7	0.8	5.2	878	1.5	5.1	794	1.3			
	68.9	991	0.7	3.2	23.0	1.3	5.1	874	-0.5	3.4	800	0.8			
	67.9	997	0.6	3.1	23.3	1.3	5.2	877	0.3	3.0	806	0.7			
	68.3	1000	0.3	2.7	23.4	0.5	3.9	882	0.6	1.9	810	0.5			
	67.7	1004	0.4	2.0	23.5	0.4	3.5	893	1.3	1.7	818	1.0			
	67.8	1007	0.3	1.6	23.5	0.0	2.2	892	-0.2	2.0	819	0.1			
	67.4	1010	0.3	1.3	23.4	-0.3	0.5	895	0.4	2.0	823	0.5			
	67.8	1015	0.5	1.5	23.5	0.4	0.5	896	0.2	1.7	828	0.6			
	67.8	1020	0.5	1.6	23.6	0.6	0.7	906	1.1	1.5	838	1.2			

67.5	1026	0.6	1.9	23.9	1.1	1.8	927	2.3	4.0	857	2.2
67.9	1030	0.4	2.0	24.0	0.3	2.4	935	0.8	4.5	866	1.1
67.9	1035	0.5	2.0	24.2	1.1	3.1	944	1.0	5.3	871	0.6
67.9	1040	0.5	2.0	24.4	0.7	3.3	948	0.4	4.6	876	0.6
67.8	1047	0.7	2.0	24.6	0.6	2.8	945	-0.3	1.8	878	0.2
68.1	1052	0.5	2.1	24.9	1.2	3.8	949	0.5	1.6	888	1.2
68.0	1057	0.5	2.1	24.9	0.3	2.9	953	0.3	1.0	892	0.5
67.9	1062	0.5	2.1	25.2	0.8	3.0	955	0.3	0.8	897	0.5
67.5	1068	0.6	2.0	25.2	0.2	2.6	954	-0.2	0.9	899	0.3
67.2	1071	0.3	1.8	25.4	0.9	2.3	958	0.4	0.9	909	1.1
67.4	1076	0.5	1.8	25.6	0.4	2.5	959	0.2	0.7	915	0.6
68.1	1080	0.4	1.7	25.8	1.0	2.6	968	0.9	1.4	921	0.7
68.3	1086	0.6	1.7	26.0	0.8	3.2	969	0.1	1.6	926	0.5
68.6	1089	0.3	1.7	26.2	0.7	2.9	972	0.3	1.5	936	1.1
68.3	1095	0.6	1.8	26.3	0.6	3.0	975	0.3	1.6	940	0.4
68.6	1100	0.5	1.9	26.6	0.9	3.0	978	0.3	1.0	945	0.5
69.3	1106	0.5	1.8	26.8	0.9	3.0	976	-0.2	0.8	948	0.3
69.4	1109	0.3	1.8	26.9	0.2	2.6	975	-0.2	0.3	958	1.2
69.0	1115	0.5	1.8	27.2	1.2	3.2	979	0.4	0.4	959	0.1
68.4	1119	0.4	1.7	27.3	0.5	2.7	982	0.3	0.4	959	0.0
68.4	1124	0.4	1.6	27.5	0.6	2.5	977	-0.5	0.1	964	0.5
69.0	1129	0.4	1.8	27.5	0.3	2.5	979	0.2	0.4	974	1.0
70.0	1133	0.4	1.6	27.7	0.7	2.1	983	0.4	0.4	977	0.3
70.1	1137	0.4	1.6	27.7	0.0	1.6	986	0.3	0.4	982	0.5
70.8	1142	0.4	1.6	27.8	0.1	1.1	990	0.4	1.3	988	0.6
70.9	1146	0.4	1.5	27.8	0.3	1.1	1000	1.0	2.2	998	1.0
70.3	1151	0.4	1.6	28.1	0.8	1.1	1000	0.0	1.7	1000	0.2
71.2	1159	0.7	1.9	28.3	0.9	2.1	1005	0.5	1.9	1007	0.7
71.2	1164	0.4	1.9	28.6	1.1	3.1	1006	0.1	1.6	1012	0.5
71.1	1168	0.3	1.9	28.9	1.0	3.9	1011	0.5	1.1	1021	0.9
71.1	1175	0.6	2.1	29.0	0.2	3.3	1015	0.4	1.5	1024	0.3
71.1	1181	0.5	1.9	29.3	1.2	3.6	1024	0.9	1.9	1032	0.8
71.0	1187	0.5	2.0	29.7	1.2	3.7	1025	0.1	1.9	1039	0.7
70.5	1191	0.3	2.0	30.0	1.0	3.7	1026	0.1	1.5	1050	1.1
70.5	1201	0.8	2.2	30.4	1.3	4.7	1032	0.6	1.7	1053	0.3
70.7	1208	0.6	2.3	30.5	0.4	3.9	1039	0.7	1.5	1065	1.1
70.4	1215	0.6	2.4	30.6	0.4	3.0	1044	0.5	1.9	1071	0.6
70.7	1219	0.3	2.4	31.0	1.2	3.3	1052	0.8	2.5	1086	1.4
69.9	1222	0.2	1.7	31.1	0.5	2.5	1047	-0.5	1.5	1086	0.0
70.2	1227	0.4	1.6	31.5	1.2	3.4	1054	0.7	1.4	1093	0.6
70.2	1233	0.5	1.5	32.0	1.4	4.4	1059	0.5	1.4	1101	0.7
70.4	1238	0.4	1.6	32.1	0.4	3.6	1068	0.8	1.5	1109	0.7
70.4	1247	0.8	2.1	32.5	1.3	4.4	1074	0.6	2.6	1117	0.7
70.4	1254	0.5	2.2	32.6	0.4	3.6	1080	0.6	2.5	1127	0.9
70.4	1263	0.7	2.4	32.8	0.5	2.7	1082	0.2	2.2	1135	0.7
70.4	1268	0.4	2.4	33.0	0.7	3.0	1086	0.4	1.7	1147	1.1
70.4	1277	0.7	2.4	33.3	0.7	2.4	1090	0.4	1.5	1151	0.3
70.4	1285	0.7	2.5	33.5	0.8	2.7	1097	0.6	1.6	1162	1.0
70.4	1295	0.7	2.5	33.8	0.9	3.1	1101	0.4	1.8	1172	0.9
70.4	1302	0.6	2.6	34.2	1	3.4	1107	0.5	1.9	1186	1.2
70.4	1310	0.6	2.6	34.5	1.0	3.8	1112	0.5	2.0	1192	0.5
70.4	1319	0.7	2.6	34.8	0.9	3.9	1120	0.7	2.1	1203	0.9
70.4	1326	0.6	2.5	35.1	0.9	3.9	1125	0.4	2.2	1214	0.9
70.4	1334	0.6	2.5	35.5	0.9	3.8	1131	0.5	2.2	1228	1.2
70.4	1343	0.7	2.5	35.8	1	3.7	1137	0.5	2.2	1234	0.5

s iates sted	CPI tradables				CoreLogic house price index				Official Cash Rate		New Zealand dollar TWI (quarterly average)				Dubai spot oil prices (quarterly average)	
	Stats NZ, RBNZ estimates				CoreLogic, RBNZ estimates				RBNZ estimates		RBNZ estimates				Thomson Reuters, RBNZ	
	Not seasonally adjusted				Seasonally adjusted				Not seasonally adjusted		Not seasonally adjusted				Seasonally adjusted	
	Annual % change pntapc	Index ptr	Quarterly % change ptrqpc	Annual % change ptrapc	Index ph	Quarterly % change phqpc	Annual % change phapc		% ocr		Index twi	Quarterly % change twiqpc	Annual % change twiapc		Index oil	Quarterly % change oilqpc
	2.5	854	0.5	0.9	701	-0.5	0.6		5.31		57.5	-1.3	-7.4		26.0	16.6
	2.3	860	0.7	1.6	699	-0.2	-1.0		6.21		56.8	-1.2	-9.6		25.2	-3.2
	2.9	873	1.6	3.2	700	0.1	-1.4		6.50		53.4	-6.0	-11.7		26.2	4.3
	3.5	888	1.7	4.6	696	-0.5	-1.2		6.50		51.1	-4.2	-12.3		27.7	5.6
	2.6	887	-0.2	3.9	697	0.2	-0.5		6.45		54.5	6.6	-5.2		25.0	-9.7
	2.2	900	1.5	4.7	701	0.5	0.3		5.91		53.7	-1.4	-5.4		24.8	-0.9
	1.5	905	0.5	3.6	708	1.0	1.2		5.69		54.0	0.5	1.1		22.8	-7.9
	1.5	907	0.3	2.1	718	1.4	3.1		5.00		53.6	-0.7	4.9		18.5	-18.9
	2.9	905	-0.2	2.1	733	2.1	5.1		4.78		55.5	3.5	1.9		21.1	13.9
	3.2	920	1.6	2.2	754	2.9	7.5		5.33		58.5	5.5	9.1		23.8	13.1
	3.5	917	-0.3	1.4	776	2.9	9.5		5.74		58.3	-0.4	8.0		24.4	2.5
	3.8	921	0.5	1.6	801	3.2	11.5		5.75		61.1	4.9	14.1		25.7	5.2
	3.4	919	-0.3	1.5	838	4.7	14.3		5.75		65.8	7.6	18.5		29.7	15.5
	3.6	910	-1.0	-1.1	873	4.2	15.9		5.49		66.2	0.7	13.1		23.8	-19.8
	3.8	904	-0.7	-1.5	941	7.7	21.3		5.06		67.3	1.7	15.5		25.3	6.3
	4.2	903	-0.1	-2.0	1000	6.3	24.9		5.00		69.0	2.6	12.9		28.6	12.8
	4.5	898	-0.6	-2.3	1035	3.5	23.6		5.18		72.3	4.8	10.0		30.3	6.2
	4.7	904	0.7	-0.7	1069	3.2	22.4		5.49		69.3	-4.1	4.8		32.1	5.8
	4.5	904	0.0	0.0	1095	2.5	16.4		5.98		72.1	3.9	7.0		34.5	7.4
	4.3	910	0.7	0.7	1124	2.7	12.4		6.43		74.4	3.2	7.7		37.2	7.9
	4.2	905	-0.5	0.8	1174	4.4	13.4		6.56		75.1	1.0	3.9		43.0	15.5
	4.4	910	0.6	0.7	1217	3.7	13.9		6.75		76.1	1.3	9.7		46.1	7.3
	4.4	921	1.1	1.9	1256	3.2	14.7		6.75		74.6	-2.0	3.5		52.9	14.8
	4.3	925	0.5	1.7	1299	3.5	15.6		6.99		76.1	2.1	2.4		55.3	4.6
	4.1	924	-0.1	2.1	1318	1.4	12.3		7.25		72.2	-5.2	-3.8		60.8	9.8
	4.1	945	2.3	3.8	1339	1.6	10.0		7.25		66.7	-7.6	-12.3		61.8	1.8
	4.0	948	0.3	3.0	1375	2.7	9.5		7.25		67.6	1.3	-9.4		63.0	1.9
	3.8	936	-1.3	1.2	1417	3.0	9.1		7.25		71.0	5.1	-6.7		59.8	-5.1
	4.1	932	-0.4	0.9	1474	4.0	11.8		7.32		72.6	2.2	0.6		58.6	-1.9
	4.1	940	0.9	-0.5	1522	3.3	13.7		7.76		75.7	4.2	13.5		61.3	4.5
	3.7	945	0.5	-0.3	1531	0.6	11.3		8.18		75.0	-0.9	11.0		67.4	10.0
	3.5	962	1.8	2.8	1529	-0.1	7.9		8.25		74.7	-0.4	5.1		86.7	28.6
	3.5	964	0.2	3.4	1517	-0.8	3.0		8.25		75.6	1.3	4.1		96.5	11.3
	3.4	986	2.3	4.8	1455	-4.1	-4.4		8.25		73.0	-3.5	-3.5		109.6	13.6
	4.1	1005	1.9	6.3	1426	-2.0	-6.8		7.96		69.1	-5.3	-7.8		111.0	1.3
	4.3	984	-2.1	2.3	1393	-2.3	-8.9		6.33		62.2	-10.0	-16.7		55.5	-50.0
	3.8	980	-0.4	1.7	1381	-0.9	-9.0		3.83		58.0	-6.7	-23.3		46.8	-15.6
	3.3	988	0.8	0.2	1409	2.0	-3.2		2.65		62.3	7.3	-14.7		55.7	19.0
	3.0	1004	1.6	-0.1	1439	2.2	0.9		2.50		66.6	7.0	-3.6		67.1	20.5
	2.3	999	-0.5	1.5	1466	1.9	5.2		2.50		69.3	3.9	11.3		77.3	15.1
	2.1	1000	0.1	2.0	1468	0.2	6.3		2.50		68.1	-1.7	17.4		78.7	1.8
	2.2	997	-0.3	1.0	1457	-0.7	3.5		2.56		68.6	0.7	10.1		74.6	-5.2
	2.5	1007	0.9	0.3	1445	-0.9	0.4		2.92		68.9	0.5	3.4		73.8	-1.1

4.6	1032	2.5	3.3	1443	-0.2	-1.6	3.00	69.8	1.2	0.7	85.9	16.4
5.2	1037	0.5	3.7	1447	0.3	-1.5	2.87	68.8	-1.3	1.1	102.9	19.9
5.2	1052	1.5	5.5	1456	0.6	-0.1	2.50	70.8	2.9	3.3	107.8	4.7
4.5	1053	0.1	4.6	1472	1.1	1.9	2.50	73.8	4.1	7.0	106.8	-0.9
2.5	1043	-0.9	1.1	1476	0.3	2.3	2.50	70.6	-4.3	1.1	108.7	1.8
2.5	1040	-0.4	0.3	1493	1.2	3.2	2.50	73.5	4.2	6.8	118.0	8.5
2.4	1041	0.1	-1.1	1514	1.4	4.0	2.50	72.3	-1.7	2.0	104.1	-11.8
2.3	1041	0.0	-1.2	1538	1.6	4.5	2.50	73.5	1.6	-0.4	105.1	0.9
2.5	1033	-0.7	-1.0	1572	2.2	6.5	2.50	74.2	1.0	5.1	108.6	3.4
2.4	1028	-0.5	-1.1	1609	2.4	7.8	2.50	75.9	2.3	3.2	110.1	1.3
2.5	1024	-0.5	-1.6	1648	2.4	8.9	2.50	76.3	0.5	5.6	99.6	-9.5
2.8	1036	1.2	-0.5	1693	2.8	10.1	2.50	75.9	-0.5	3.4	104.3	4.6
2.9	1030	-0.5	-0.3	1716	1.3	9.1	2.50	78.2	2.9	5.4	108.3	3.9
3.0	1023	-0.7	-0.6	1735	1.1	7.8	2.55	80.1	2.4	5.5	107.0	-1.2
2.7	1025	0.2	0.1	1751	0.9	6.3	2.99	81.5	1.8	6.8	104.4	-2.4
2.5	1026	0.1	-1.0	1774	1.3	4.8	3.44	80.1	-1.7	5.5	100.1	-4.1
2.4	1017	-0.8	-1.3	1837	3.6	7.1	3.50	77.5	-3.3	-0.9	77.3	-22.8
2.4	998	-1.9	-2.4	1892	3.0	9.1	3.50	77.9	0.6	-2.7	54.2	-29.8
2.1	1007	0.9	-1.8	1958	3.5	11.8	3.44	76.1	-2.3	-6.6	60.0	10.6
1.5	1013	0.7	-1.2	2041	4.2	15.1	3.00	69.8	-8.2	-12.9	49.4	-17.6
1.8	995	-1.8	-2.1	2062	1.0	12.2	2.69	72.1	3.3	-6.9	42.3	-14.4
1.6	986	-0.9	-1.2	2135	3.5	12.8	2.44	72.2	0.0	-7.4	32.9	-22.3
1.8	991	0.6	-1.5	2252	5.5	15.0	2.25	73.6	2.0	-3.3	42.4	28.8
2.4	991	0.0	-2.1	2330	3.5	14.2	2.11	77.0	4.5	10.2	43.9	3.6
2.4	994	0.3	-0.1	2356	1.1	14.3	1.86	77.6	0.9	7.6	48.8	11.1
2.5	1002	0.8	1.6	2388	1.3	11.9	1.75	77.9	0.3	7.9	54.7	12.2
2.4	1000	-0.2	0.9	2400	0.5	6.6	1.75	76.5	-1.8	3.9	48.7	-11.0
2.6	1002	0.2	1.1	2422	0.9	3.9	1.75	77.1	0.8	0.2	50.7	4.0
2.5	999	-0.3	0.5	2447	1.0	3.9	1.75	73.8	-4.3	-5.0	58.9	16.2
2.3	999	0.0	-0.3	2474	1.1	3.6	1.75	74.9	1.5	-3.8	64.8	10.1
2.4	1003	0.4	0.3	2490	0.6	3.7	1.75	73.7	-1.6	-3.6	71.1	9.6
2.5	1012	0.9	1.0	2498	0.3	3.2	1.75	72.4	-1.9	-6.1	75.3	6.0
2.7	1008	-0.4	0.9	2511	0.5	2.6	1.75	73.4	1.5	-0.4	68.2	-9.4
2.8	995	-1.3	-0.4	2516	0.2	1.7	1.75	74.0	0.7	-1.2	63.4	-7.1
2.8	1004	0.9	0.1	2530	0.5	1.6	1.60	72.6	-1.8	-1.5	67.8	6.9
3.2	1005	0.1	-0.7	2573	1.7	3.0	1.21	72.0	-0.9	-0.5	62.2	-8.3
3.1	1009	0.4	0.1	2622	1.9	4.4	1.00	71.3	-0.9	-2.9	62.2	0.1
3.4	1010	0.1	1.5	2711	3.4	7.7	0.87	70.9	-0.6	-4.2	50.4	-19.1
3.1	998	-1.2	-0.6	2710	0.0	7.1	0.25	69.7	-1.7	-4.0	33.3	-33.9
2.6	1004	0.6	-0.1	2849	5.1	10.7	0.25	72.0	3.3	0.1	41.2	23.8
2.8	1006	0.2	-0.3	3060	7.4	16.7	0.25	72.9	1.2	2.2	44.1	6.9
2.1	1015	0.9	0.5	3301	7.9	21.8	0.25	74.9	2.7	5.7	59.4	34.7
2.9	1018	0.3	2.0	3483	5.5	28.5	0.25	74.8	-0.1	7.3	63.7	7.4
3.1	1017	-0.1	1.3	3491	0.2	22.5	0.25	74.8	0.0	3.9	63.1	-1.0
3.1	1014	-0.3	0.8	3493	0.1	14.2	0.25	74.8	0.0	2.7	62.5	-1.0
3.4	1011	-0.3	-0.4	3494	0.0	5.8	0.25	74.8	0.0	-0.1	61.9	-1.0
3.0	1011	0.0	-0.7	3496	0.0	0.4	0.31	74.8	0.0	0.0	61.2	-1.0
3.1	1013	0.2	-0.4	3504	0.2	0.4	0.49	74.8	0.0	0.0	60.6	-1.0
3.3	1011	-0.2	-0.3	3522	0.5	0.8	0.67	74.8	0.0	-0.1	60.0	-1.0
3.4	1010	-0.1	-0.1	3549	0.8	1.6	0.85	74.8	0.0	0.0	59.4	-1.0
3.6	1010	0.0	-0.1	3576	0.8	2.3	1.04	74.8	0.0	0.0	58.7	-1.1
3.5	1013	0.3	0.0	3607	0.9	2.9	1.32	74.8	0.0	0.0	58.1	-1.1
3.6	1013	0.0	0.2	3653	1.3	3.7	1.49	74.8	0.0	0.0	57.5	-1.1
3.5	1012	-0.1	0.2	3697	1.2	4.2	1.64	74.8	0.0	-0.1	56.9	-1.1
3.5	1013	0.1	0.3	3744	1.3	4.7	1.78	74.8	0.1	0.0	56.2	-1.1

Quarterly average) estimates used	Trading-partner GDP				Trading-partner CPI			
	Haver Analytics, Stats NZ, RBNZ estimates				Haver Analytics, Stats NZ, RBNZ estimates			
	Seasonally adjusted				Seasonally adjusted			
	Annual % change oilapc	Index tpgdp	Quarterly % change tpgdpqpc	Annual % change tpgdpapc	Index tpp	Quarterly % change tppqpc	Annual % change tppapc	
	120.6	100.0	1.1	4.9	100.0	0.6	1.7	
	62.5	101.1	1.1	5.1	100.3	0.3	1.8	
	39.9	101.7	0.6	4.3	101.7	1.4	2.8	
	24.2	102.1	0.4	3.3	102.2	0.5	2.8	
	-3.8	102.7	0.6	2.7	102.8	0.6	2.8	
	-1.5	103.1	0.4	2.0	103.4	0.6	3.1	
	-13.0	103.3	0.2	1.6	103.7	0.3	1.9	
	-33.2	103.9	0.6	1.8	103.9	0.2	1.7	
	-15.7	104.8	0.9	2.1	104.4	0.4	1.5	
	-3.9	106.1	1.2	3.0	104.9	0.5	1.4	
	7.0	106.9	0.7	3.5	105.3	0.4	1.6	
	38.9	107.5	0.6	3.5	105.8	0.5	1.8	
	40.9	108.0	0.4	3.0	106.6	0.8	2.2	
	-0.1	108.4	0.4	2.1	106.7	0.0	1.7	
	3.7	110.3	1.7	3.2	107.1	0.4	1.7	
	11.1	111.9	1.5	4.1	107.7	0.6	1.8	
	2.1	112.9	0.9	4.6	108.4	0.7	1.7	
	34.7	113.8	0.8	5.0	109.0	0.6	2.2	
	36.1	114.8	0.8	4.1	109.6	0.5	2.4	
	30.3	115.7	0.8	3.4	110.3	0.7	2.5	
	41.7	116.8	1.0	3.4	110.8	0.5	2.3	
	43.7	117.9	0.9	3.6	111.4	0.5	2.2	
	53.6	119.3	1.2	3.9	112.3	0.8	2.5	
	48.7	120.6	1.1	4.2	113.1	0.7	2.5	
	41.4	121.6	0.9	4.1	113.7	0.6	2.6	
	34.1	122.4	0.6	3.8	114.7	0.9	3.0	
	19.1	123.5	0.9	3.6	115.4	0.6	2.7	
	8.1	125.3	1.4	3.9	115.6	0.2	2.2	
	-3.5	126.8	1.2	4.3	116.1	0.4	2.1	
	-0.9	128.0	0.9	4.6	117.1	0.8	2.1	
	6.9	129.1	0.9	4.5	118.0	0.8	2.3	
	45.0	130.4	1.0	4.1	119.5	1.3	3.3	
	64.5	131.4	0.7	3.6	121.0	1.3	4.2	
	78.9	131.7	0.2	2.9	122.6	1.4	4.7	
	64.7	131.6	0.0	1.9	124.0	1.1	5.1	
	-36.0	129.9	-1.3	-0.4	123.3	-0.5	3.2	
	-51.5	128.6	-1.0	-2.2	122.9	-0.4	1.6	
	-49.2	130.0	1.1	-1.3	123.1	0.2	0.4	
	-39.5	131.3	1.0	-0.3	123.8	0.6	-0.2	
	39.2	132.9	1.2	2.3	124.7	0.7	1.1	
	68.0	134.4	1.1	4.5	125.5	0.7	2.2	
	33.9	136.1	1.3	4.7	126.1	0.5	2.4	
	9.9	137.4	0.9	4.7	126.7	0.5	2.3	

11.1	138.8	1.0	4.5	128.0	1.0	2.6
30.8	139.6	0.6	3.9	129.5	1.2	3.2
44.5	140.7	0.7	3.3	130.8	1.0	3.7
44.7	142.2	1.1	3.5	131.6	0.7	3.9
26.6	143.2	0.7	3.2	132.3	0.5	3.4
14.6	145.0	1.2	3.8	133.0	0.5	2.7
-3.4	145.9	0.6	3.7	133.7	0.5	2.2
-1.6	146.9	0.7	3.3	134.5	0.6	2.1
-0.1	147.9	0.7	3.3	135.2	0.6	2.2
-6.7	149.1	0.8	2.8	136.1	0.6	2.3
-4.3	150.3	0.8	3.0	136.4	0.3	2.1
-0.8	152.0	1.1	3.5	137.4	0.8	2.2
-0.3	153.4	0.9	3.7	138.4	0.7	2.3
-2.8	154.7	0.8	3.7	139.1	0.5	2.3
4.8	156.1	0.9	3.8	139.9	0.6	2.5
-4.0	157.6	1.0	3.7	140.4	0.3	2.1
-28.6	158.9	0.8	3.6	140.5	0.1	1.6
-49.3	160.5	1.0	3.8	140.5	0.0	1.0
-42.5	161.7	0.8	3.6	141.3	0.6	1.0
-50.6	163.2	0.9	3.6	141.8	0.4	1.1
-45.3	164.3	0.7	3.4	142.0	0.1	1.0
-39.4	165.8	0.9	3.3	142.2	0.2	1.2
-29.4	167.2	0.9	3.4	142.9	0.5	1.1
-11.2	168.5	0.8	3.3	143.5	0.4	1.1
15.3	170.2	1.0	3.6	144.2	0.5	1.5
66.5	171.7	0.9	3.5	144.9	0.5	1.9
15.1	173.3	0.9	3.6	145.4	0.3	1.7
15.4	175.3	1.1	4.0	146.0	0.4	1.8
20.7	176.9	0.9	3.9	146.7	0.5	1.8
18.4	178.8	1.0	4.1	147.6	0.6	1.8
45.8	180.4	0.9	4.1	148.2	0.4	2.0
48.6	181.6	0.6	3.6	149.0	0.5	2.1
15.9	182.8	0.7	3.3	149.4	0.3	1.8
-2.2	184.3	0.8	3.1	149.7	0.2	1.4
-4.6	185.8	0.8	3.0	150.9	0.8	1.8
-17.4	187.0	0.7	3.0	151.5	0.4	1.7
-8.7	188.0	0.5	2.9	152.6	0.7	2.1
-20.5	180.3	-4.1	-2.2	153.3	0.5	2.4
-50.9	173.2	-4.0	-6.8	152.0	-0.9	0.7
-33.7	183.9	6.2	-1.7	153.0	0.7	1.0
-29.2	188.0	2.2	0.0	153.2	0.1	0.4
17.8	189.0	0.4	4.7	154.0	0.7	0.7
91.3	191.0	0.9	10.0	155.0	0.6	2.2
53.1	192.0	1.0	4.7	156.0	0.5	2.0
41.8	195.0	1.1	3.5	157.0	0.5	2.3
4.2	197.0	1.1	4.2	157.0	0.4	2.0
-3.9	199.0	1.1	4.4	158.0	0.4	1.9
-4.0	201.0	1.0	4.4	159.0	0.5	1.8
-4.0	203.0	0.9	4.2	160.0	0.5	1.9
-4.0	205.0	0.8	3.9	161.0	0.6	2.0
-4.1	206.0	0.8	3.6	162.0	0.6	2.1
-4.1	208.0	0.8	3.3	162.0	0.6	2.2
-4.2	209.0	0.8	3.2	163.0	0.5	2.2
-4.2	211.0	0.8	3.2	164.0	0.5	2.2
-4.2	213.0	0.8	3.2	165.0	0.5	2.2