

# *Welcome to the University of Auckland Business School (UABS)*

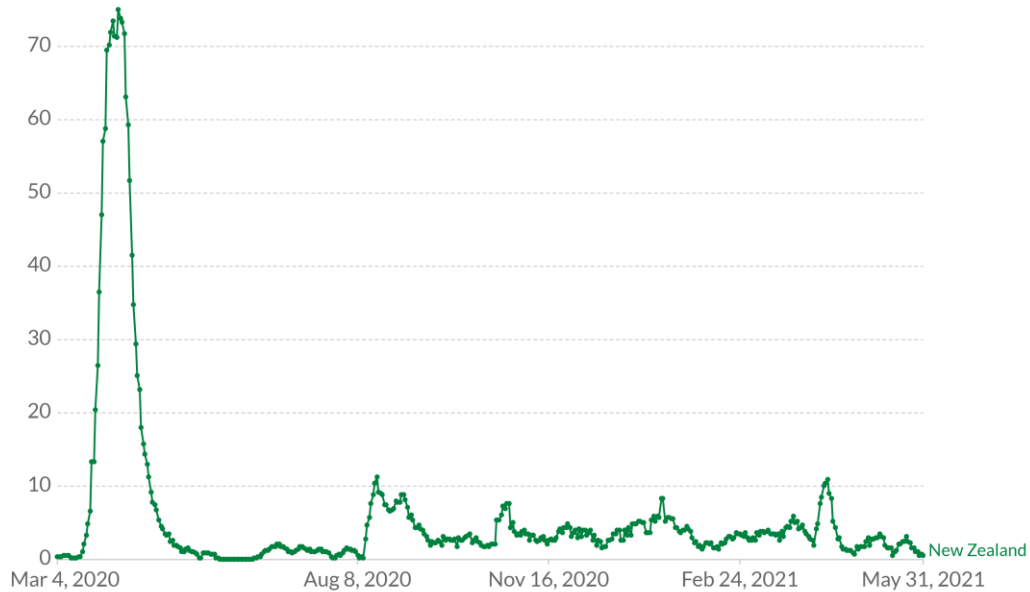


# New Zealand is Safe

- No New Case
- 7-day avg = 1

## Daily new confirmed COVID-19 cases

Shown is the rolling 7-day average. The number of confirmed cases is lower than the number of actual cases; the main reason for that is limited testing.

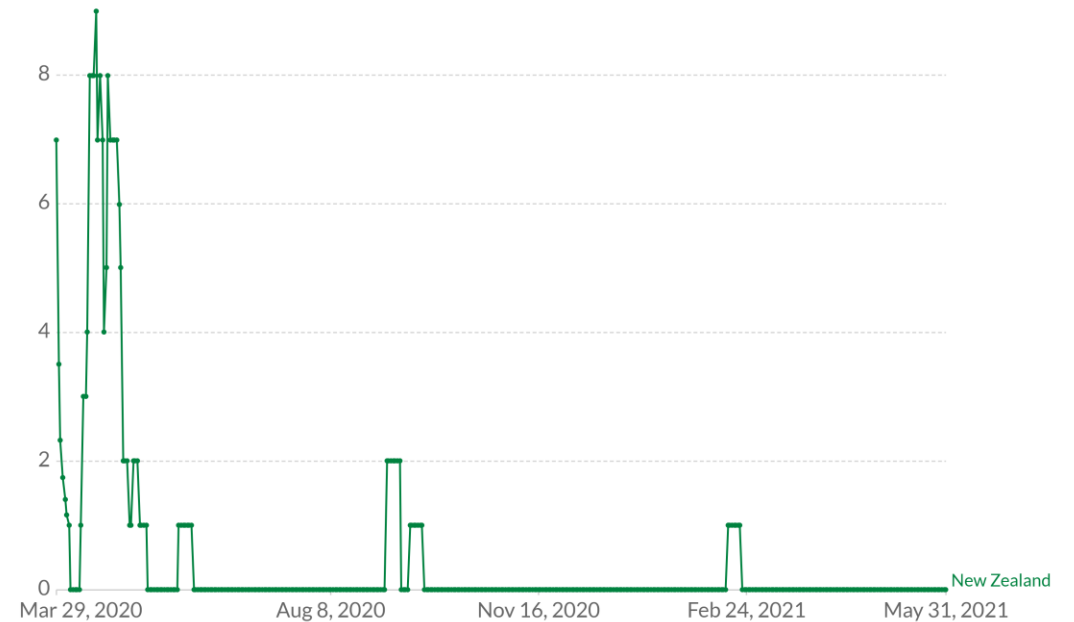


Source: Johns Hopkins University CSSE COVID-19 Data

CC BY

## Weekly confirmed COVID-19 deaths

Weekly confirmed deaths refer to the cumulative number of confirmed deaths over the previous week.



Source: Johns Hopkins University CSSE COVID-19 Data

CC BY



*UoA was opened on  
23 May 1883*

*“Today, the University of Auckland is the largest university in New Zealand, hosting over 40,000 students on five Auckland campuses.”*



# Clock Tower

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- Designed by R.A. Lippincott, a Chicago-trained architect





## Sir Owen G Glenn Building – Business School

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- Designed by architect firms Francis-Jones Morehen Thorp and Archimedia, the Sir Owen G Glenn Building was completed in 2008 and has since won numerous awards, including an NZIA Auckland Architecture Award



# Self-Introduction

- **Edward Yiu** 姚松炎
- ***PhD (HKU), FRICS, MHKIS***
  - 2019 – now: Associate Professor, University of Auckland Business School
  - 2016 – 2017 elected member of Hong Kong Legislative Council;
  - 2013 – 2016 Associate Professor, Urban Studies Program, Chinese University of Hong Kong
  - 2013 – 2016 Associate Director, Institute of Future Cities
- **Research Interest: Urban Study, Housing Policy, Real Estate Economics and Finance**

<https://unidirectory.auckland.ac.nz/people/profile/edward-yiu>

<https://www.facebook.com/yiued>



# **Housing Markets of New Zealand - Is it Different or Similar to Other Countries?**

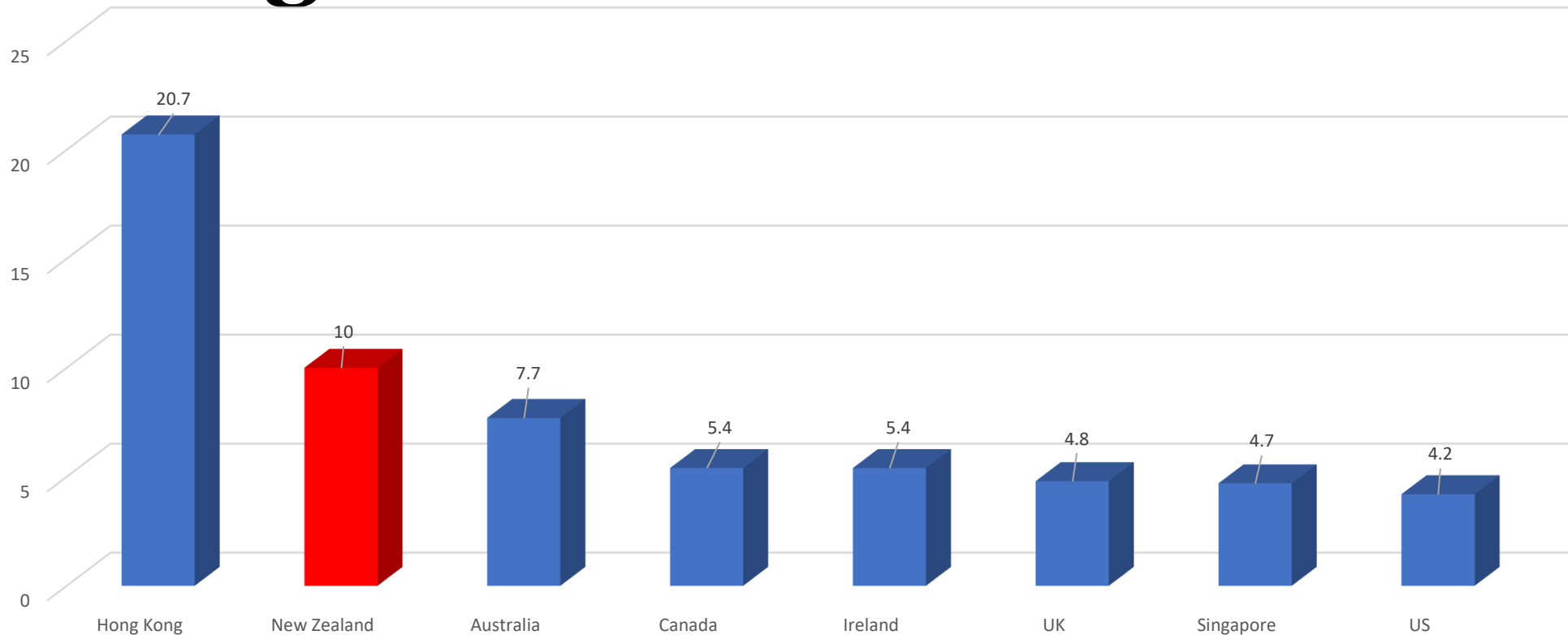
Dr. Edward Yiu

Associate Professor, University of Auckland

June 2, 2021

An Online Presentation to the CUHK Urban Studies Programme students

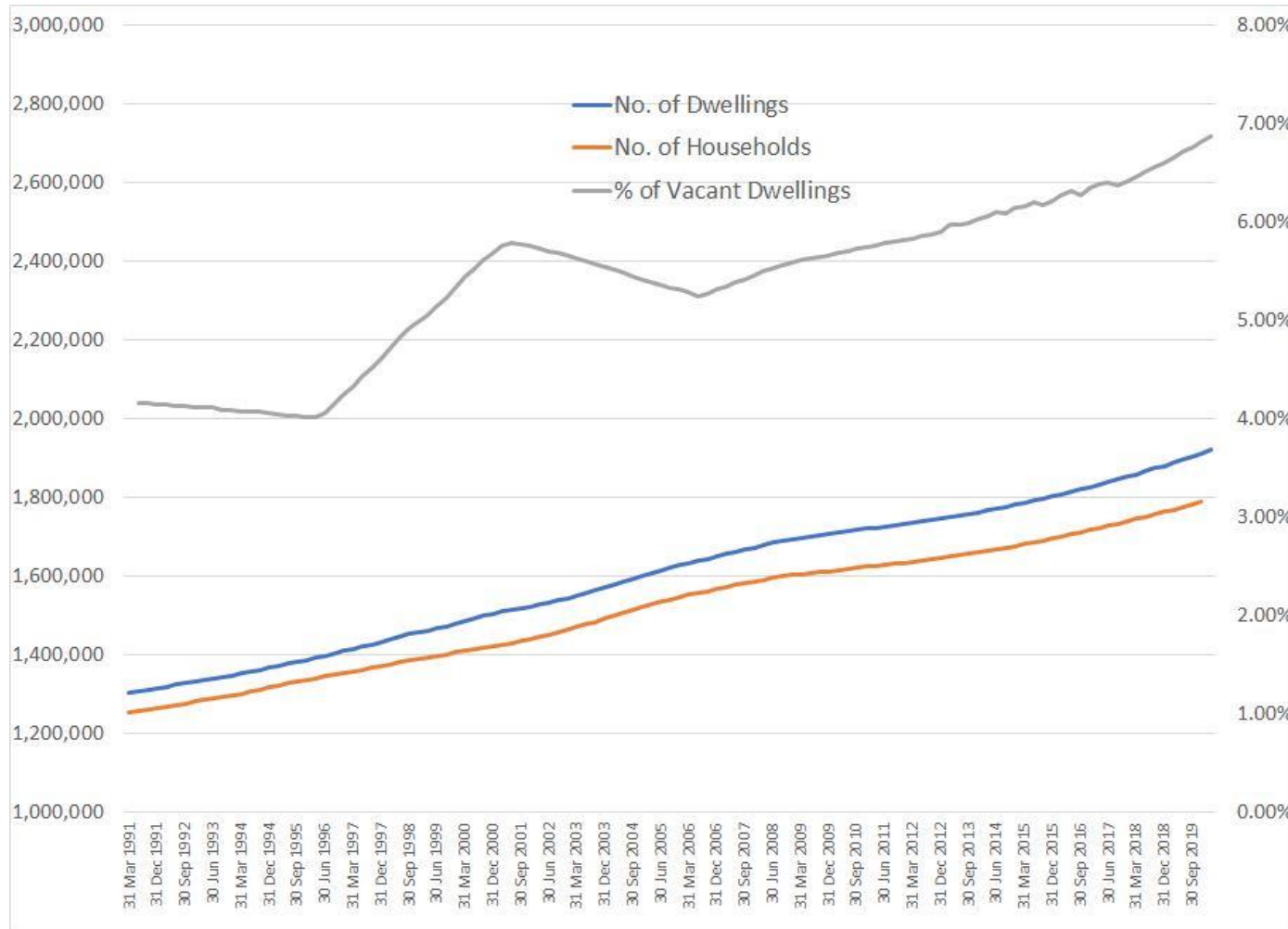
# NZ – the 2<sup>nd</sup> most unaffordable housing market in the world in 2019



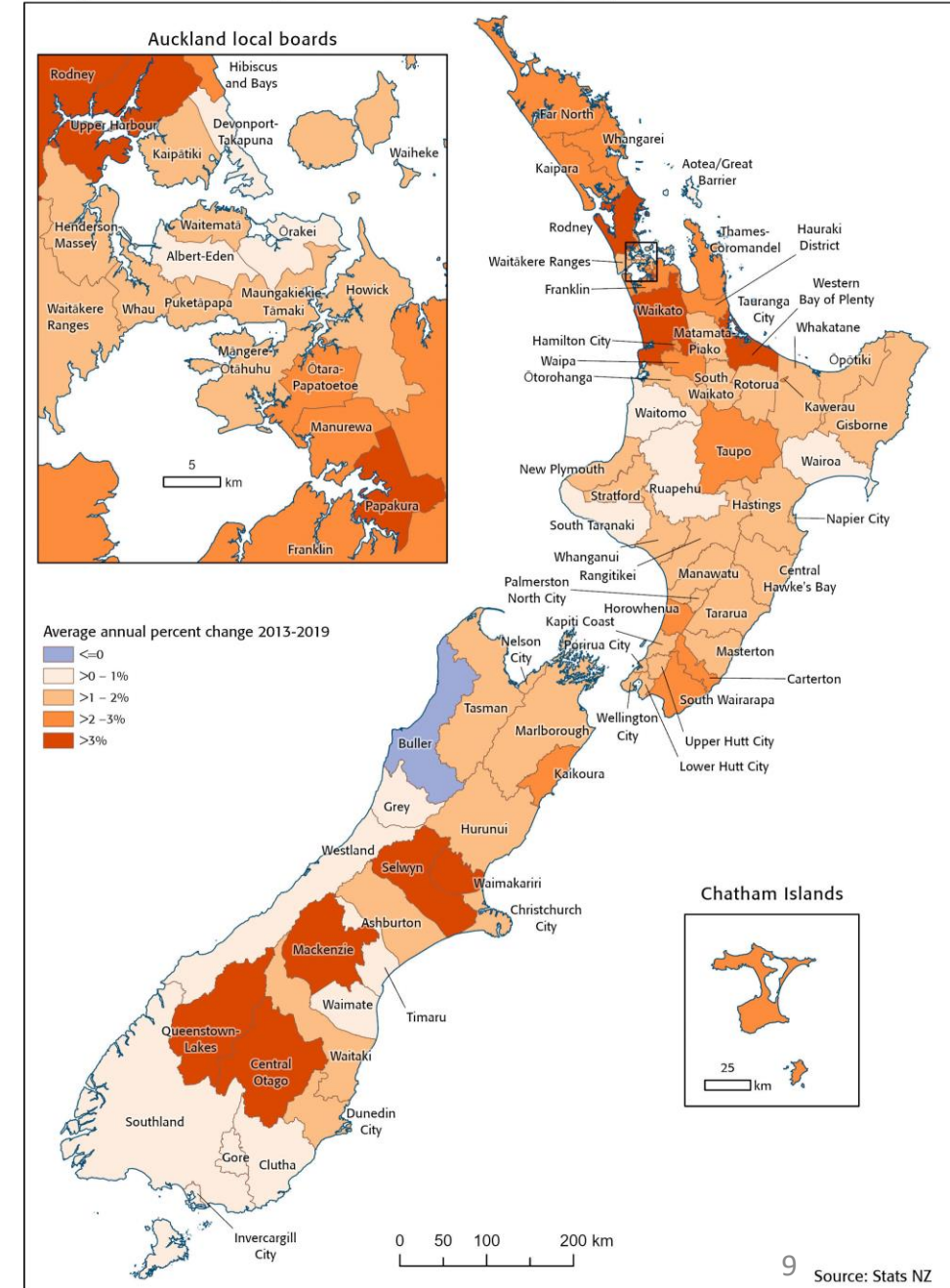
Demographia (2021) median house price to household income ratio in 2020



# Common Solution: Increase Supply - Building More Dwellings to Accommodate More Households



Estimated resident population change, by territorial authority and Auckland local board areas, 30 June 2013 –30 June 2019



# Densification of the Auckland Region

Building Consents in Auckland: 12-Month rolling total

Source: Stats NZ



- Land lot subdivision and
- Building higher-rise townhouses and apartments
- Convert from single-ownership to multiple-ownership
  - Three types of land lease

# Three Types of Land Lease

- Freehold, Cross-lease and Unit Titles

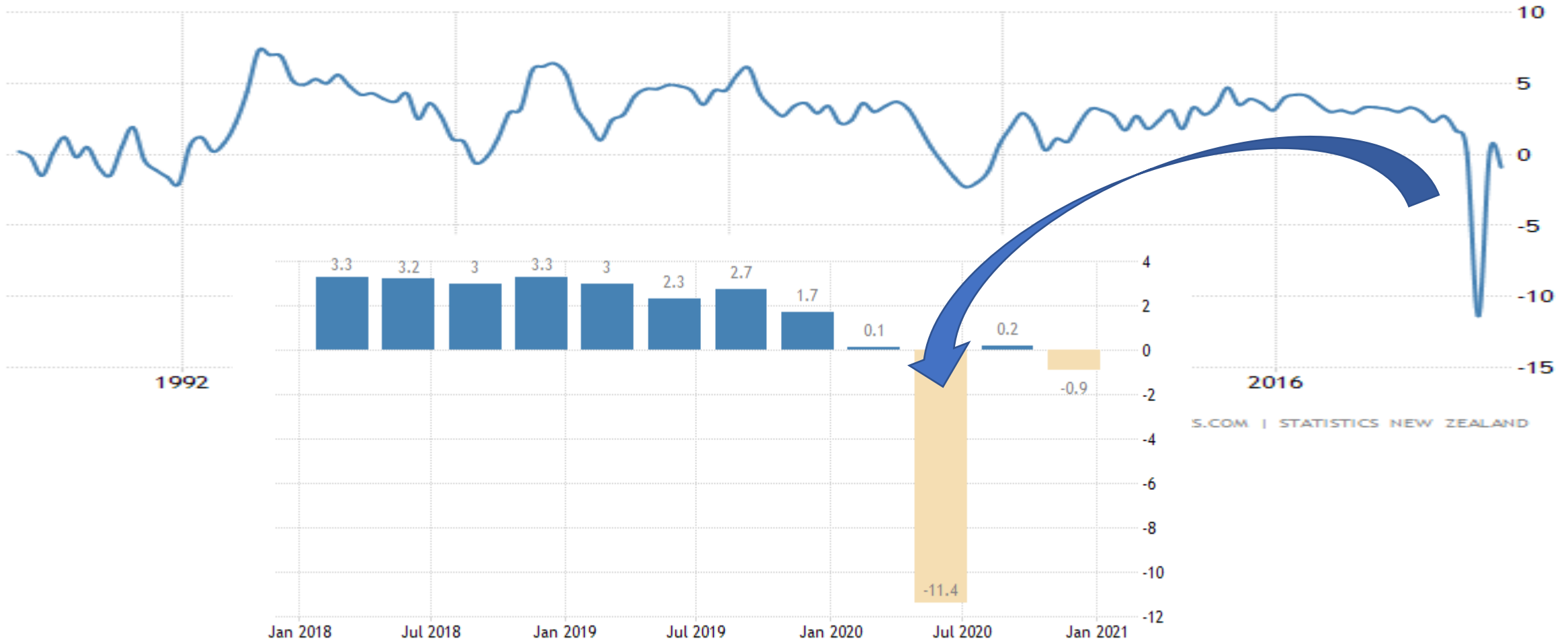


Freehold Land	Cross Lease Land	Unit Titles Land
Detached house	Semi-detached houses	Townhouses or Apartments
houses built on freehold land and cross-leased land are typical stand-alone houses of similar designs and facilities.		Houses built on unit titles land are townhouses or apartments

# Governance of the Three Types of Land Lease

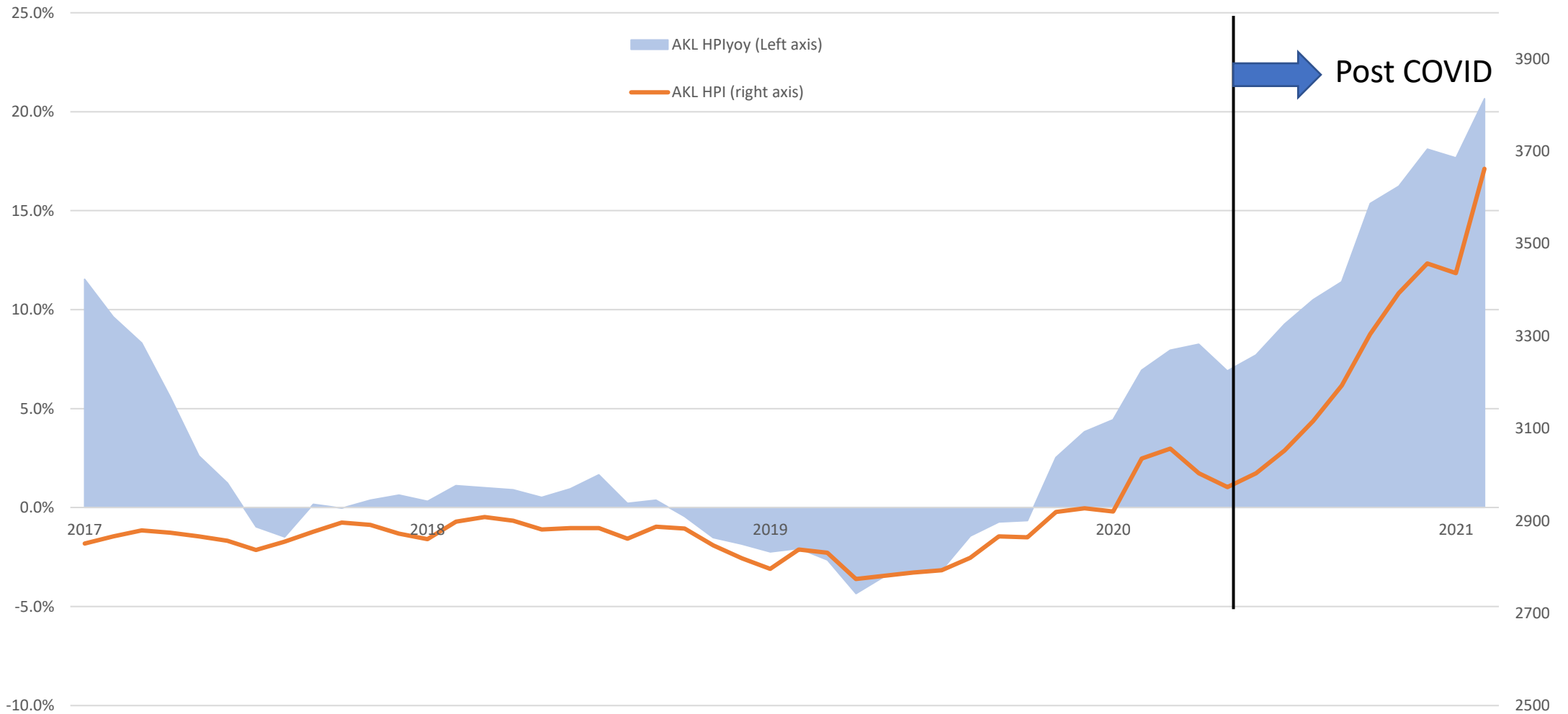
SUBDIVIDE TO:	FREEHOLD	CROSS-LEASE	UNIT TITLE
<b>Land and Structure Ownership</b>	Single-owned land and structures	Co-owned land and 999-year leasehold structures	Co-owned land and structures
<b>Building Type</b>	Detached / Semi-detached houses	Detached / Semi-detached houses	Apartments / Townhouses
<b>Single or Multiple Owners</b>	Single-owned	Multiple-owned	Multiple-owned
<b>Explicit Costs</b>	Subdivision fee	N.A.	Subdivision fee and Management fee
<b>Internal Governing</b>	N.A. (Externalised)	Covenants in common law (i.e., voluntary-based self-governance, unanimous consent required)	Unit Title Act (i.e., regulatory-based governance, a stipulated proportion of owners' consent required)
<b>Limitations / Uncertainties</b>	Subject to topographical constraints in land subdivision	Require unanimous (100%) consent of owners for any works in common parts	Require paying a management fee and liable to the decisions made by the body corporate

# 2020: the Deepest Recession of NZ



SOURCE: TRADINGECONOMICS.COM | STATISTICS NEW ZEALAND

# 2020: One of the Biggest Rebounds of House Prices in NZ



# 2020: A Recession, House Supply Increases, but House Price Rises! Why?

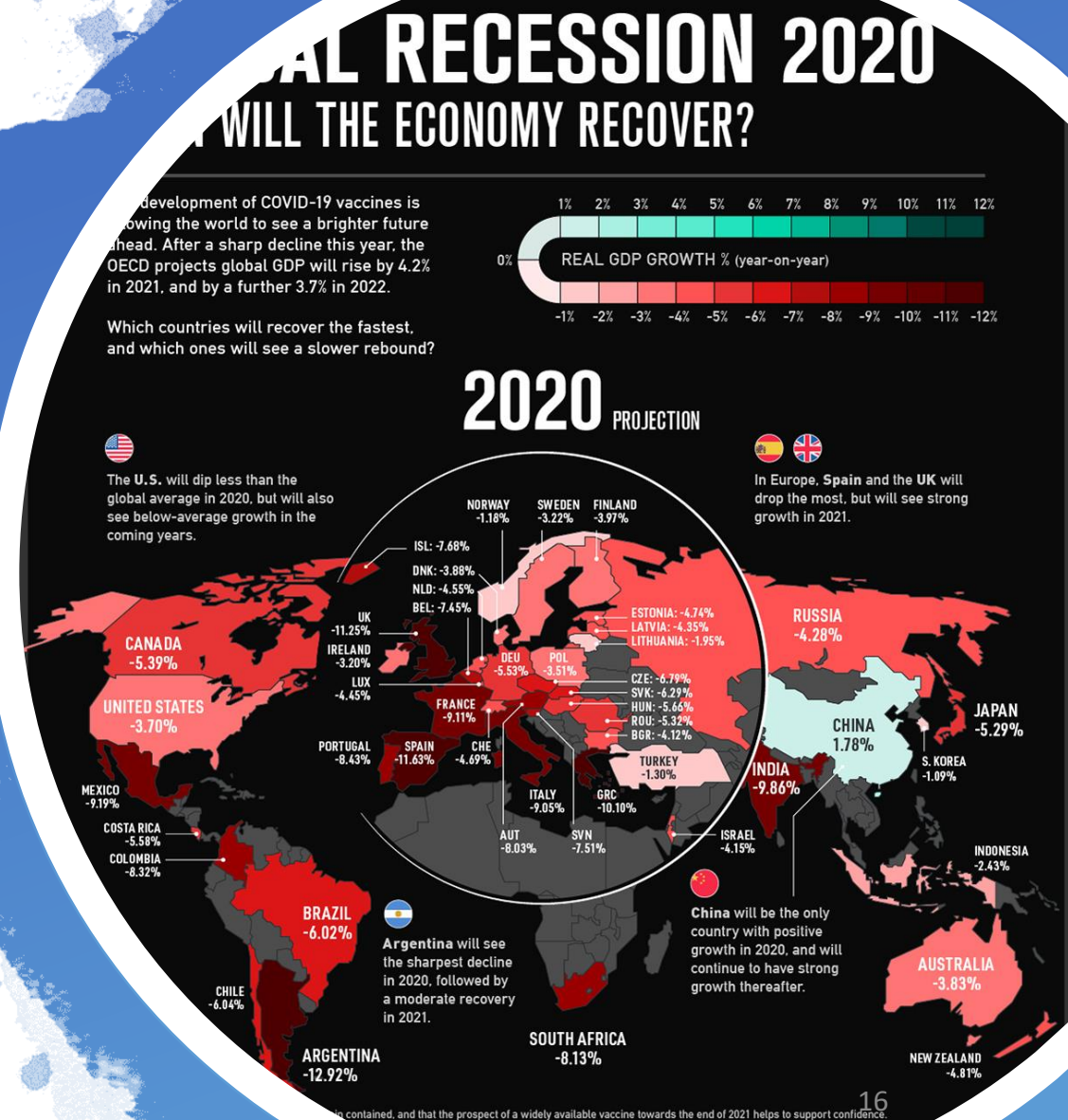
- Hypotheses:
  - Economic growth
  - No capital gain tax
  - Insufficient house supply
  - Migrants
  - Monetary policy (cut interest rate and relax mortgage restrictions)



## Why House Price Rise? A 6-economy Comparison

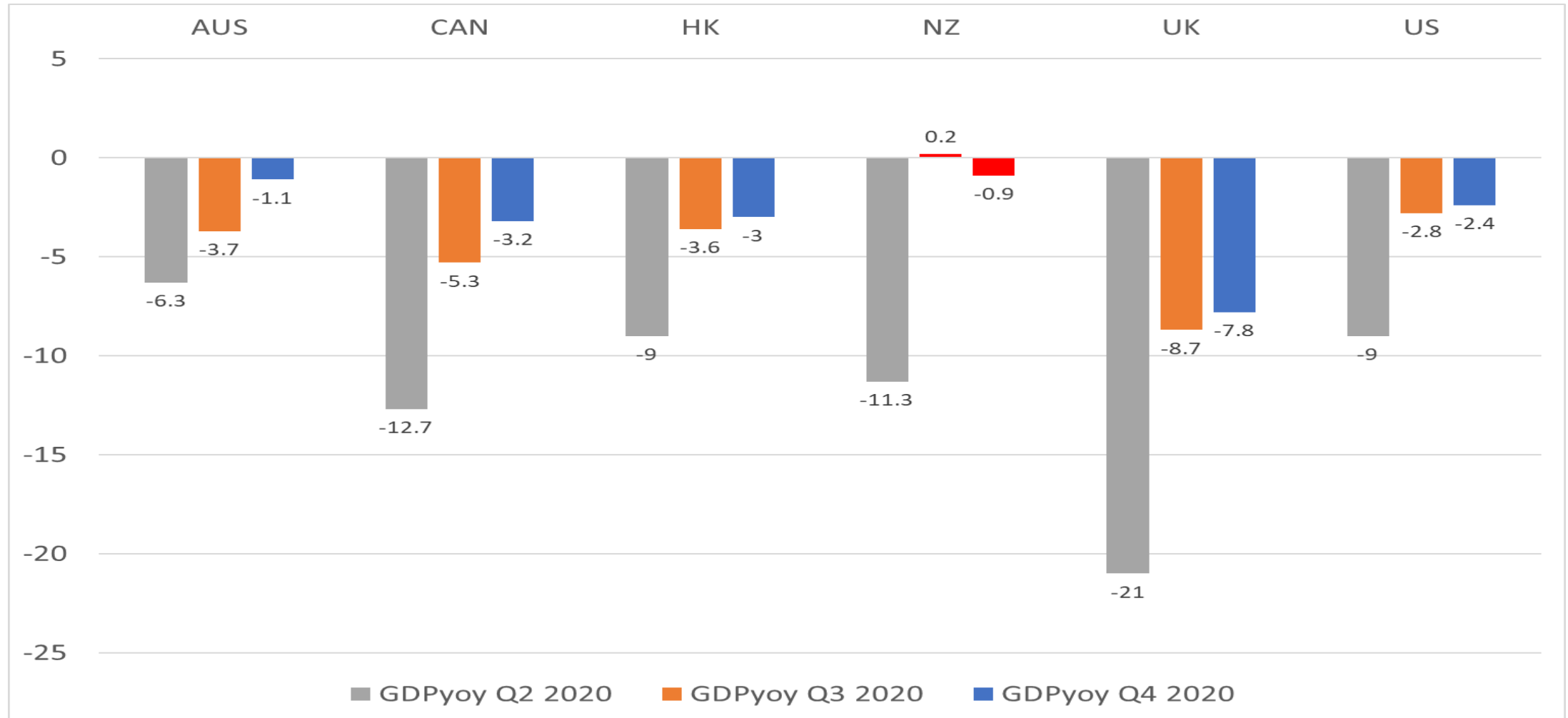
# Hypothesis 1: Economic Growth?

<https://www.visualcapitalist.com/global-recession-2020-recovery/>



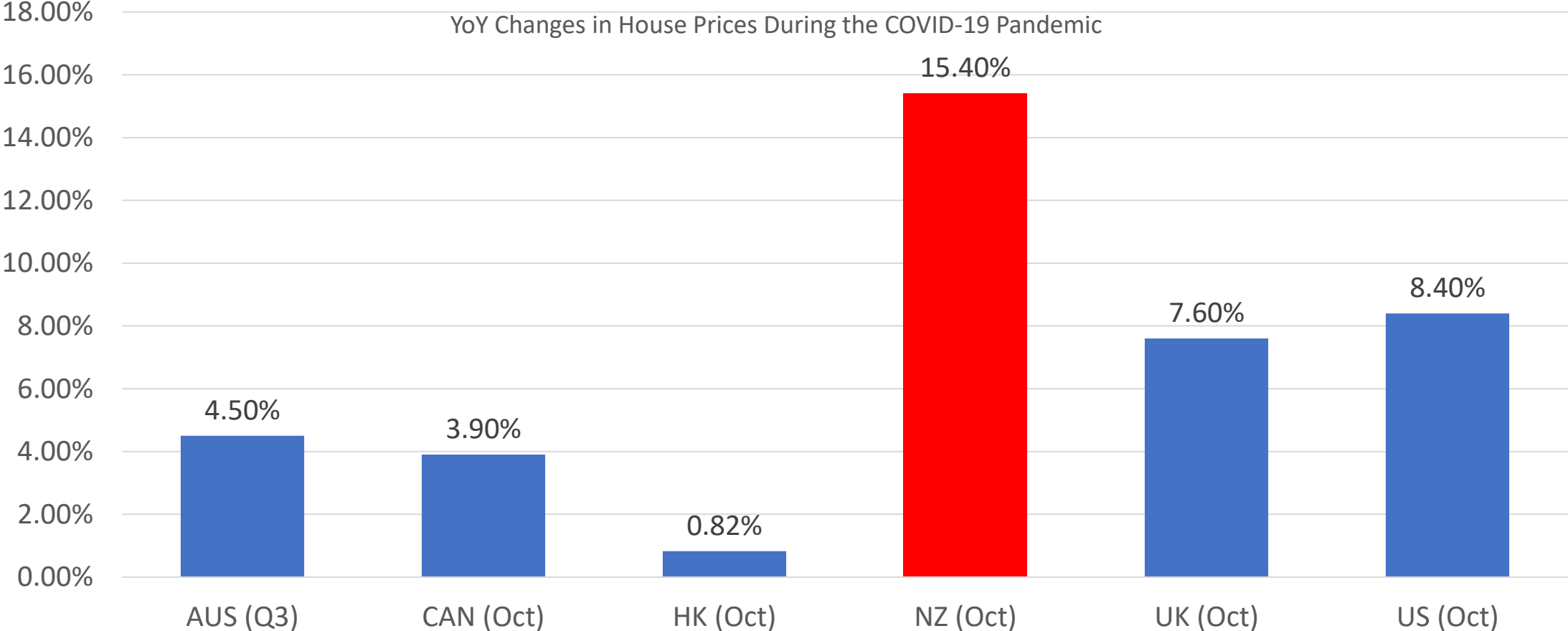


# COVID Causes a Global Recession



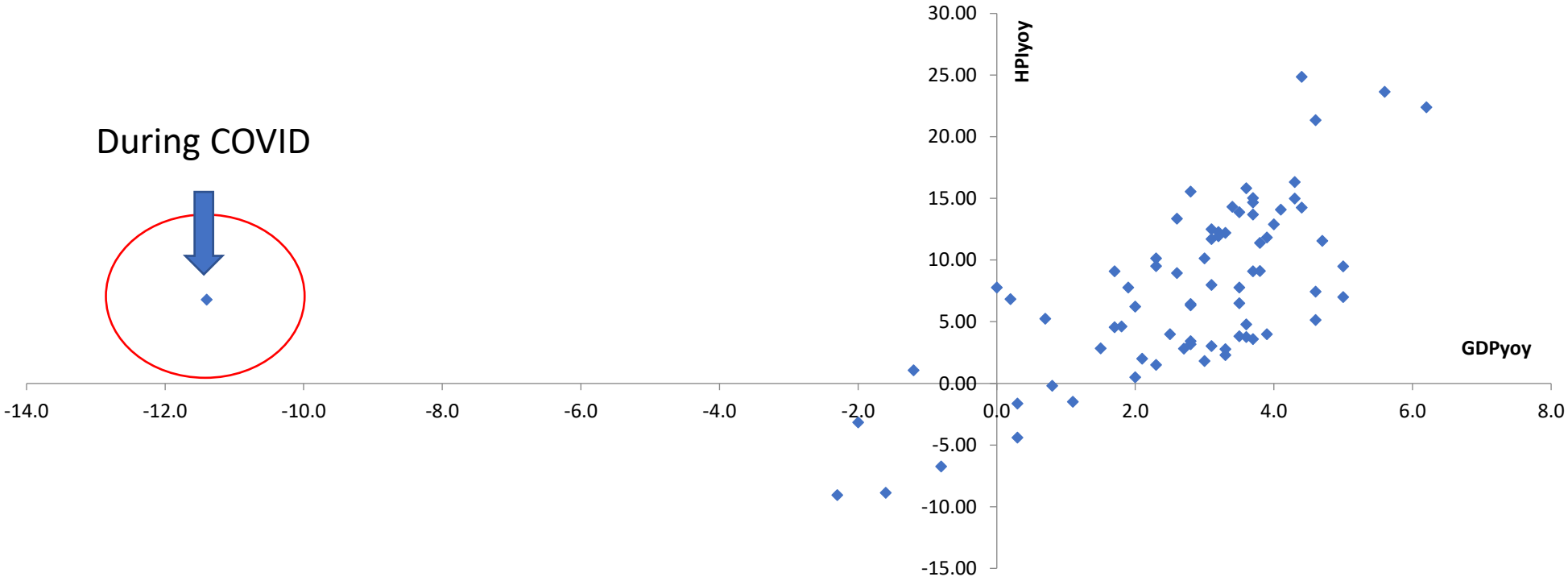
The latest 3 releases of Year-on-Year % Changes of GDP During the COVID-19 Pandemic of the six developed economies. Sources: Trading Economics.

# House Price Rise in COVID is a Global Phenomenon



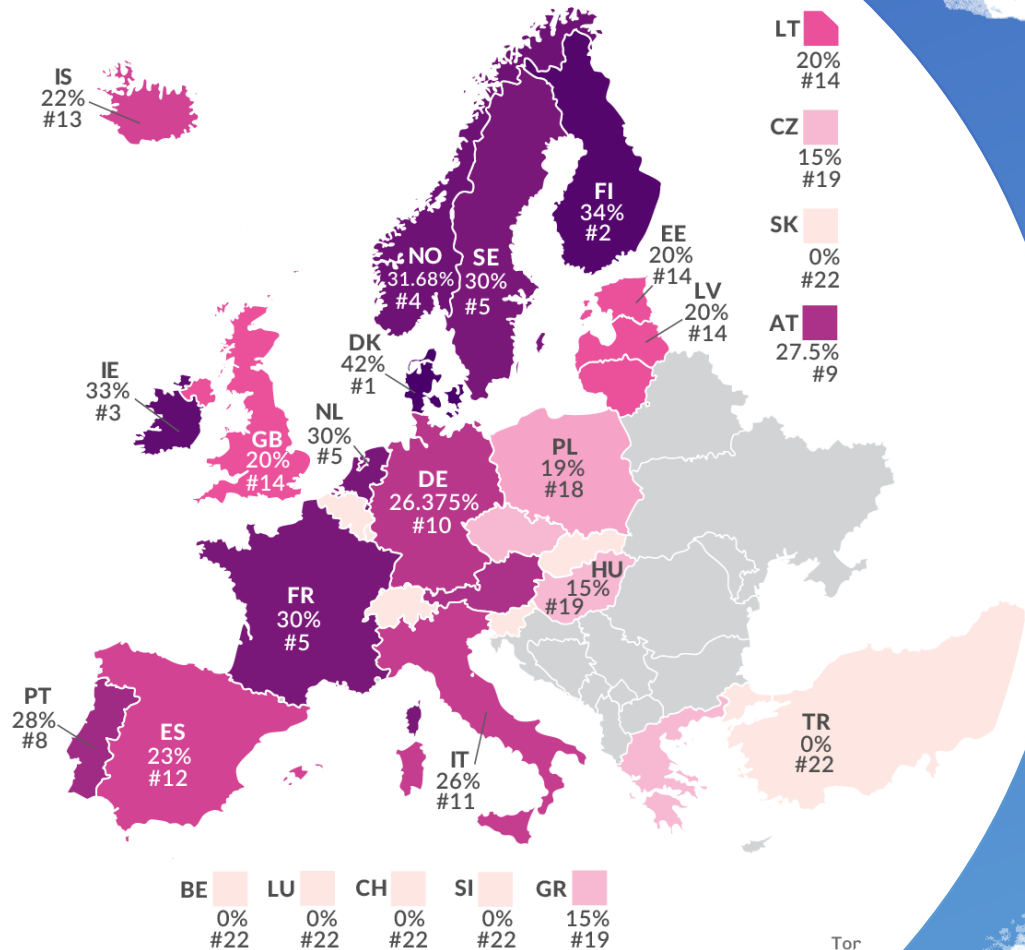
The latest release of Year-on-Year Growth Rates of the House Price Indices During the COVID-19 Pandemic of the six developed economies: Australia (AUS), Canada (CAN), New Zealand (NZ), United Kingdom (UK), United States (US) and Hong Kong (HK). Sources: AUS-ABS, CAN-TradingEconomics, HK-RVD, NZ-REINZ, UK-HM, US-FRED.

# Evidence that the house price growth is **NOT** due to GDP growth in NZ during COVID



## Capital Gains Tax Rates in Europe

Capital Gains Tax Rates in European OECD Countries, 2020



# Hypothesis 2: NO Capital Gain Tax?

Note: If the capital gains tax rate varies by type of asset sold, the tax rate applying to the sale of listed shares after an extended period of time is used.

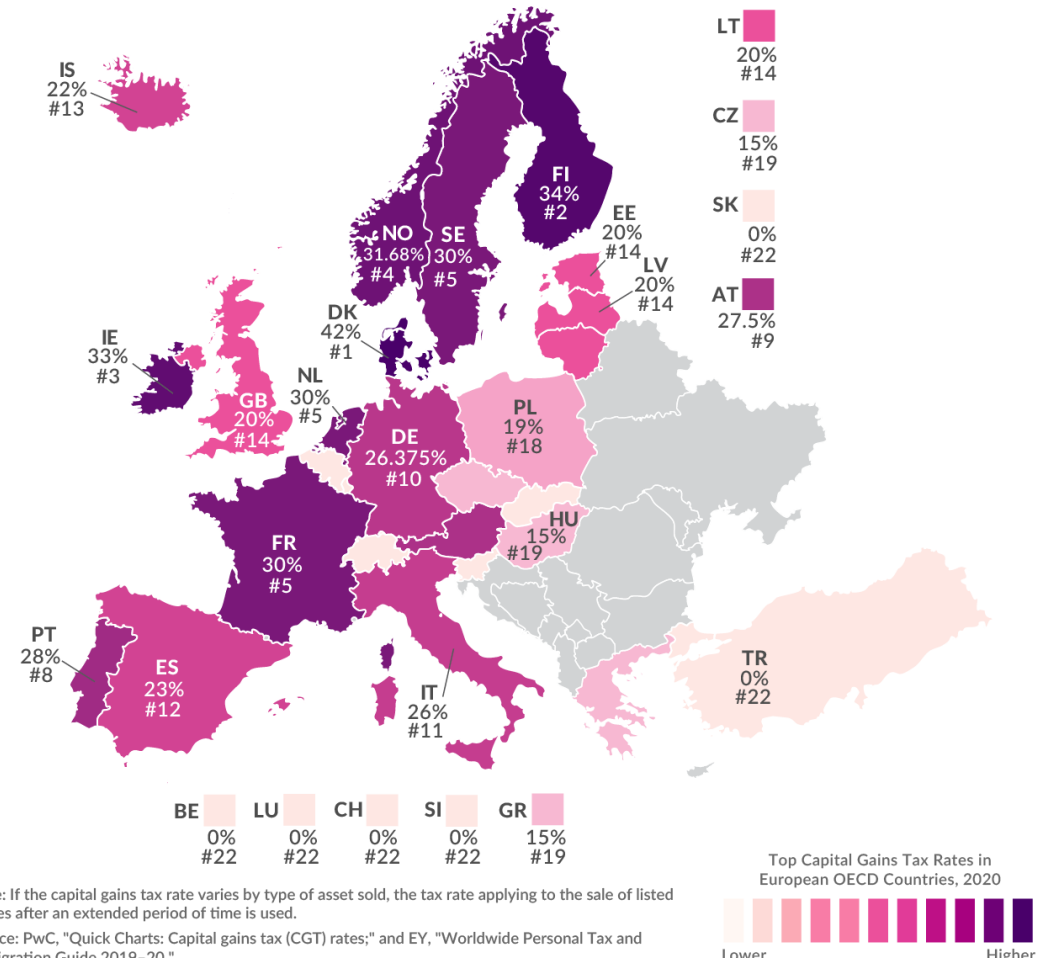
Source: PwC, "Quick Charts: Capital gains tax (CGT) rates;" and EY, "Worldwide Personal Tax and Investment Guide 2019-20."

# Capital Gain Tax

- NZ – bright line test
- HK – No Capital Gain Tax
- UK – 20%

## Capital Gains Tax Rates in Europe

Top Capital Gains Tax Rates in European OECD Countries, 2020



# Bright-line Property Rule for Residential Property

From Oct 2015  
to Mar 2018

Income tax  
payable if sold  
within 2-year

From Mar 2018  
to Mar 2021

Income tax  
payable if sold  
within 5-year

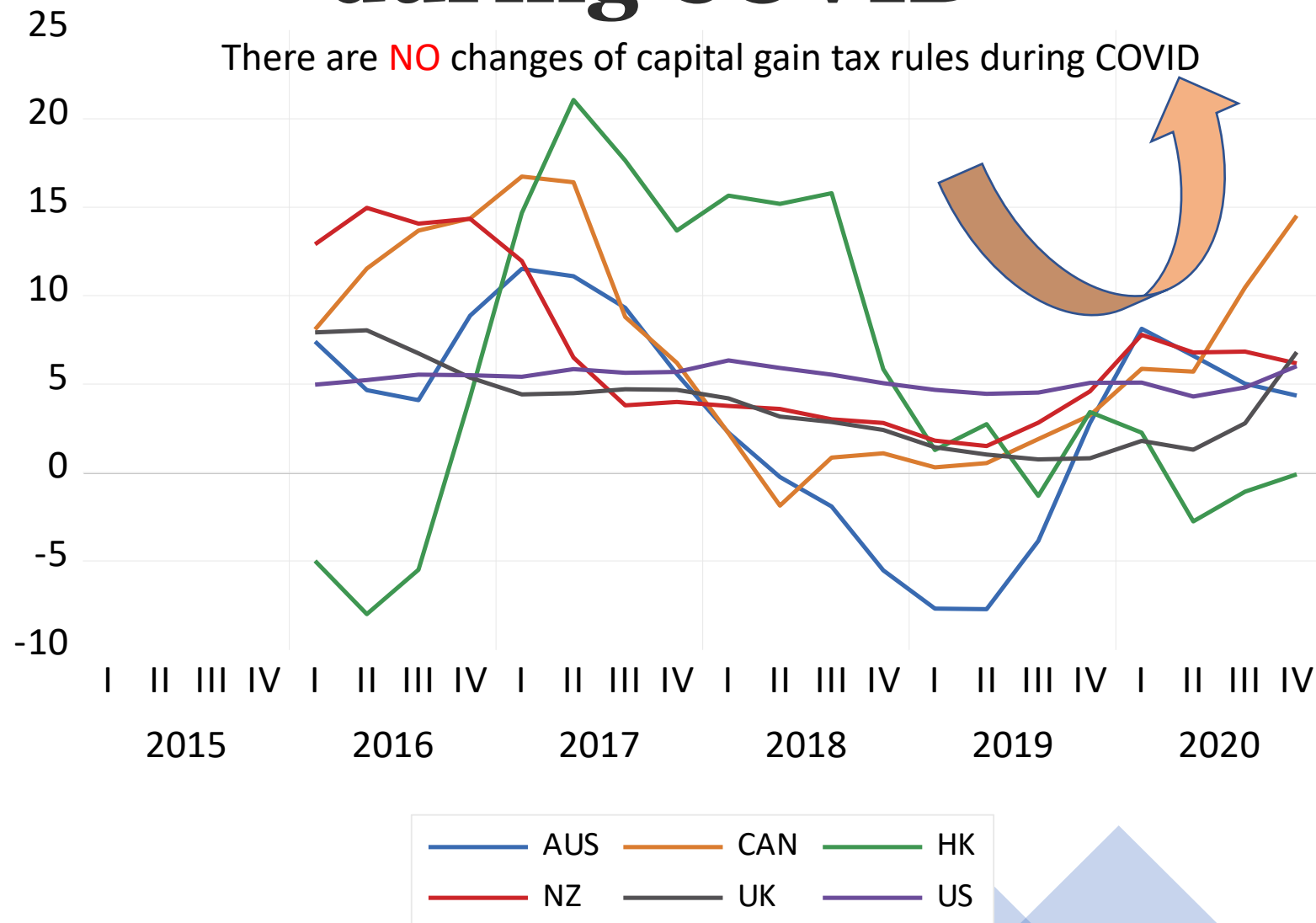
From Mar 27,  
2021 onwards

Income tax  
payable if sold  
within 10-year,  
except new  
builds



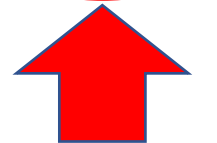
<https://www.ird.govt.nz/property/buying-and-selling-residential-property/the-brightline-property-rule>

# “Synchronised” House Price Rebounds during COVID



# Hypothesis 3: Insufficient House Supply?

Housing Supply Compared to Housing Demand in Auckland							
Year to June	Natural increase in population	Net internal migration	Net international migration	Total population growth	New dwellings required	New dwellings completed	Surplus/deficit of new dwellings
2019	12,800	-11,800	24,700	25,700	8892	10,080	1188
2020	12,800	-12,600	36,700	36,900	12,768	14,353	1585



Year	Surplus
2019	1188
2020	1585

<https://www.interest.co.nz/property/108084/aucklands-housing-crisis-starting-ease-supply-starts-overtake-demand-and-accumulated>



# Numbers of Households and Private Dwellings Changes YoY – 1992 - 2020

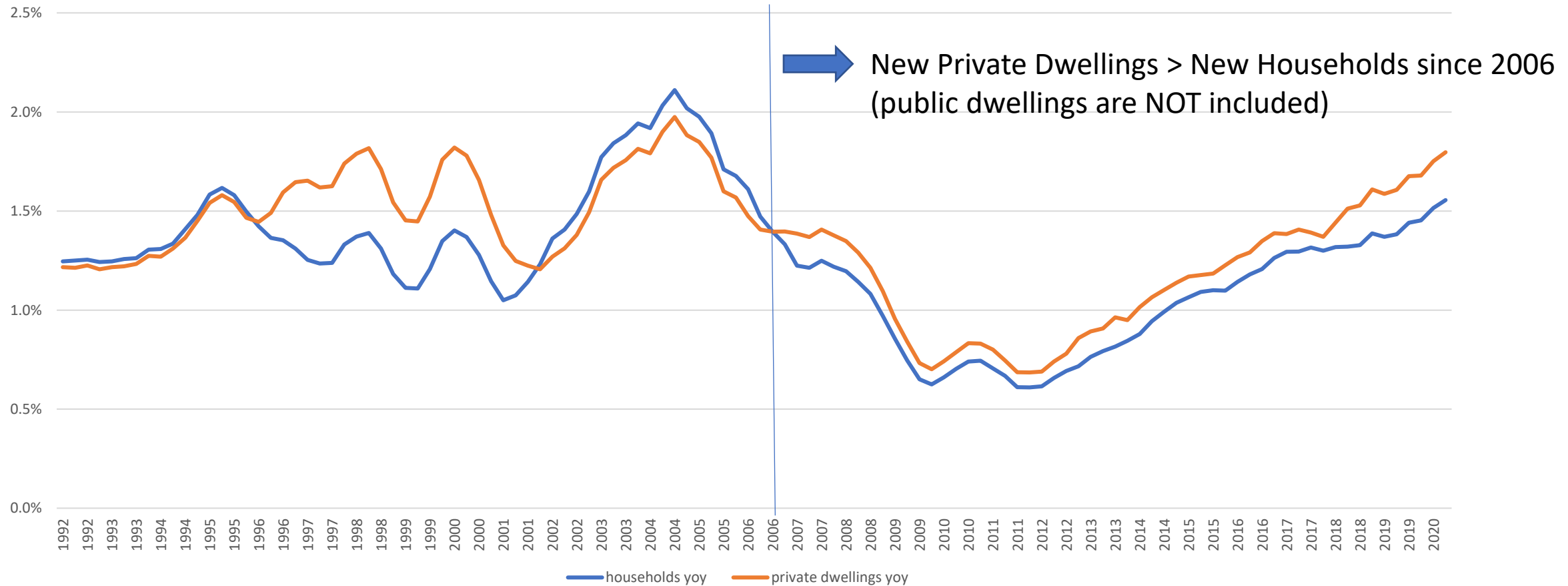


Figure 3 Number of Households yoy versus Number of Private Dwellings yoy, Jun 1992—Sep 2020. Source: Stats NZ (2020a)

# Hypothesis 4: Migrants?

- Since Oct 2018, non-resident or non-citizen buyers are banned from buying houses by the **Overseas Investment Amendment Act**



# Home Transfers by Non-Citizens or Non-Resident – 2017 Mar – 2020 Sep

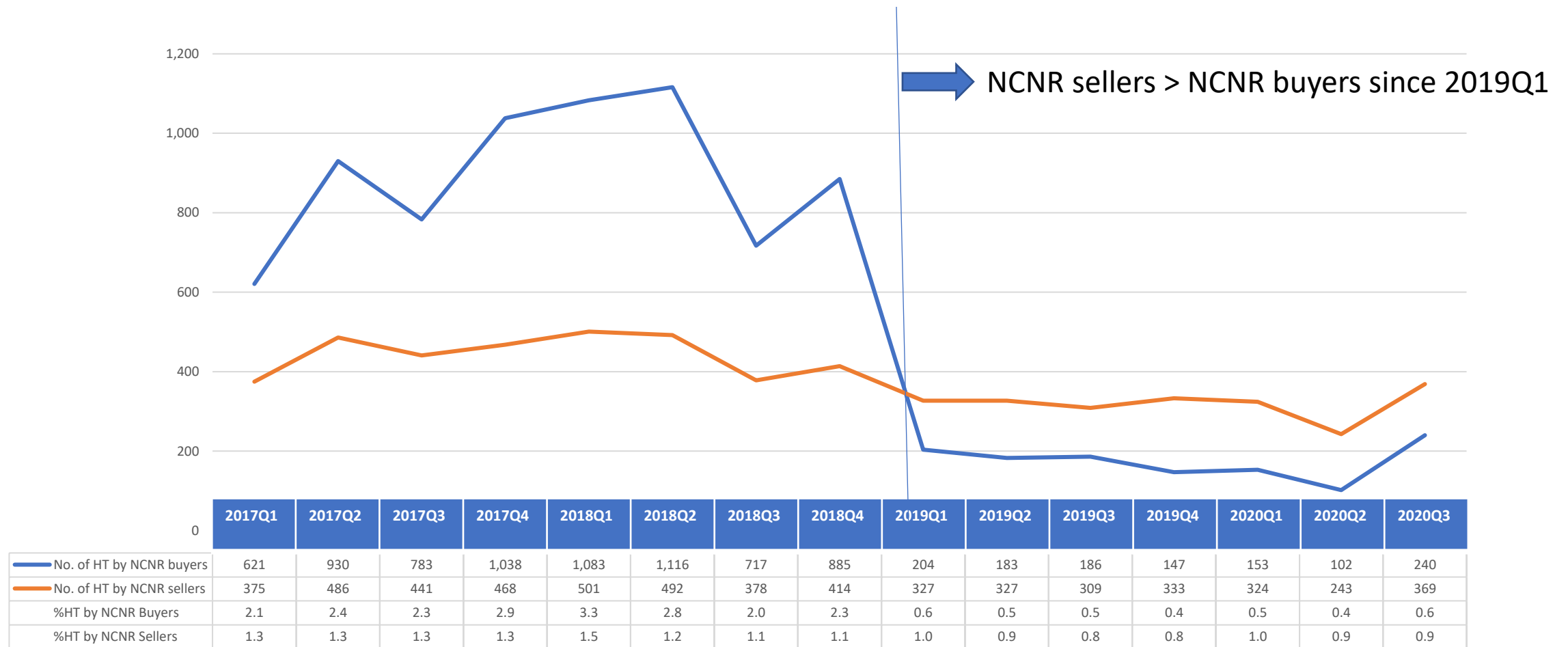
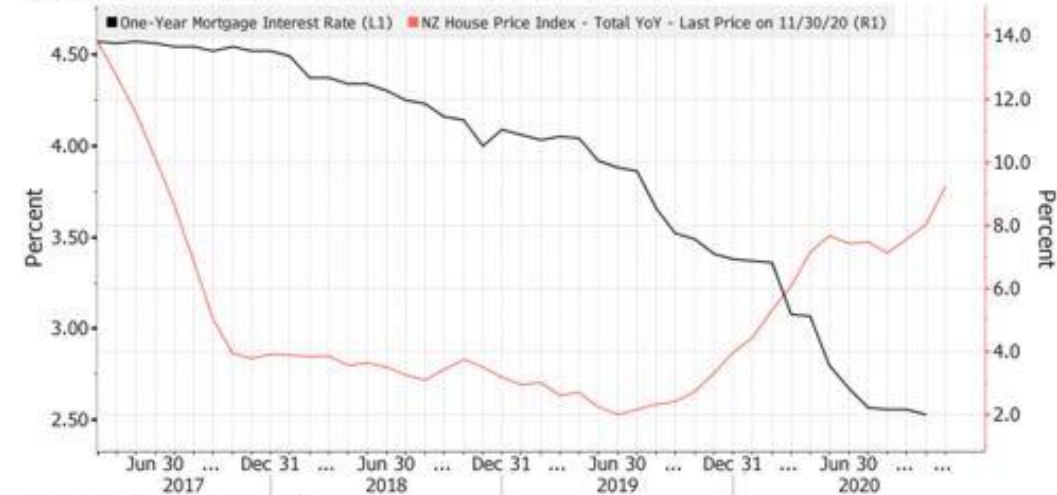


Figure 4 Home Transfers by Non-Citizen or Non-Resident (NCNR) Buyers and Sellers, Mar 2017—Sep 2020.  
Source: Stats NZ (2020c)

# Hypothesis 5: Mortgage Policy?

**Boom**  
New Zealand house prices surge as mortgage rates drop

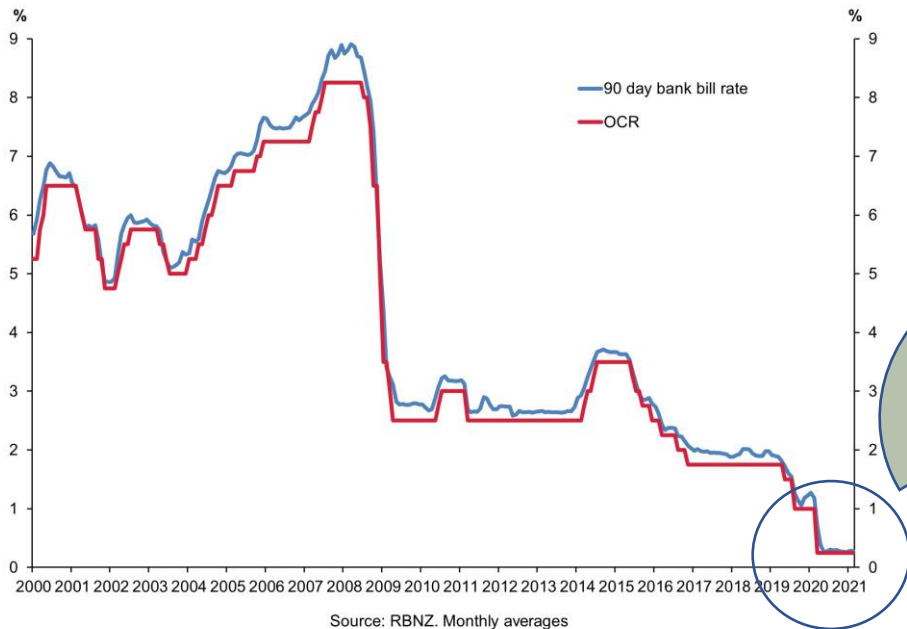


Source: Source: CoreLogic, RBNZ

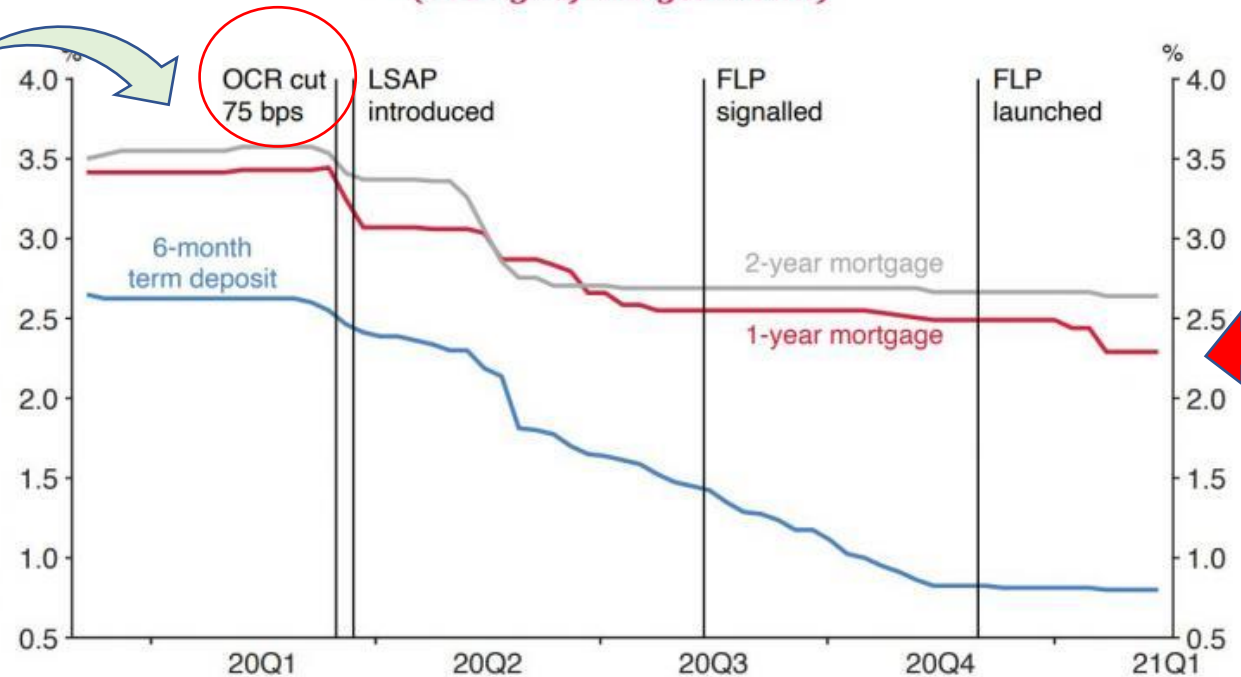
<https://www.bloomberg.com/news/articles/2021-01-05/new-zealand-posts-fastest-house-price-growth-since-mid-2017>

# An Interest Rate Cut in 2020

OCR cut 75bps -> 1-yr Mortgage Rate cut 125bps from 2020Q1 to 2021Q1



**Figure 3.4**  
Retail deposit and mortgage rates  
*(average of 4 largest banks)*



<https://www.rbnz.govt.nz/monetary-policy/about-monetary-policy/what-is-the-official-cash-rate>

<https://www.interest.co.nz/banking/109222/rbnz-governor-adrian-orr-tells-banks-lower-interest-rates-more-noting-if-offshore>

# Relaxation and Reinstatement of Mortgage Loan Restrictions

**Reserve Bank removes LVR restrictions for 12 months**  
30 April 2020

The Reserve Bank has today decided to remove mortgage loan-to-value ratio (LVR) restrictions for 12 months. The decision was made to ensure LVR restrictions didn't have an undue impact on borrowers or lenders as part of the mortgage deferral scheme implemented in response to the COVID-19 pandemic.

**Owner-occupier loans – 20 / 20**  
REINSTATE on 1 March 2021



From 1 March, 2021 most owner-occupiers will need a 20% deposit to secure a property. Lenders can provide a maximum of 20% of new mortgage lending to owner-occupiers at LVRs greater than 80 percent (those with less than a 20% deposit).

**Investor loans – 30 / 5**  
REINSTATE on 1 May 2021

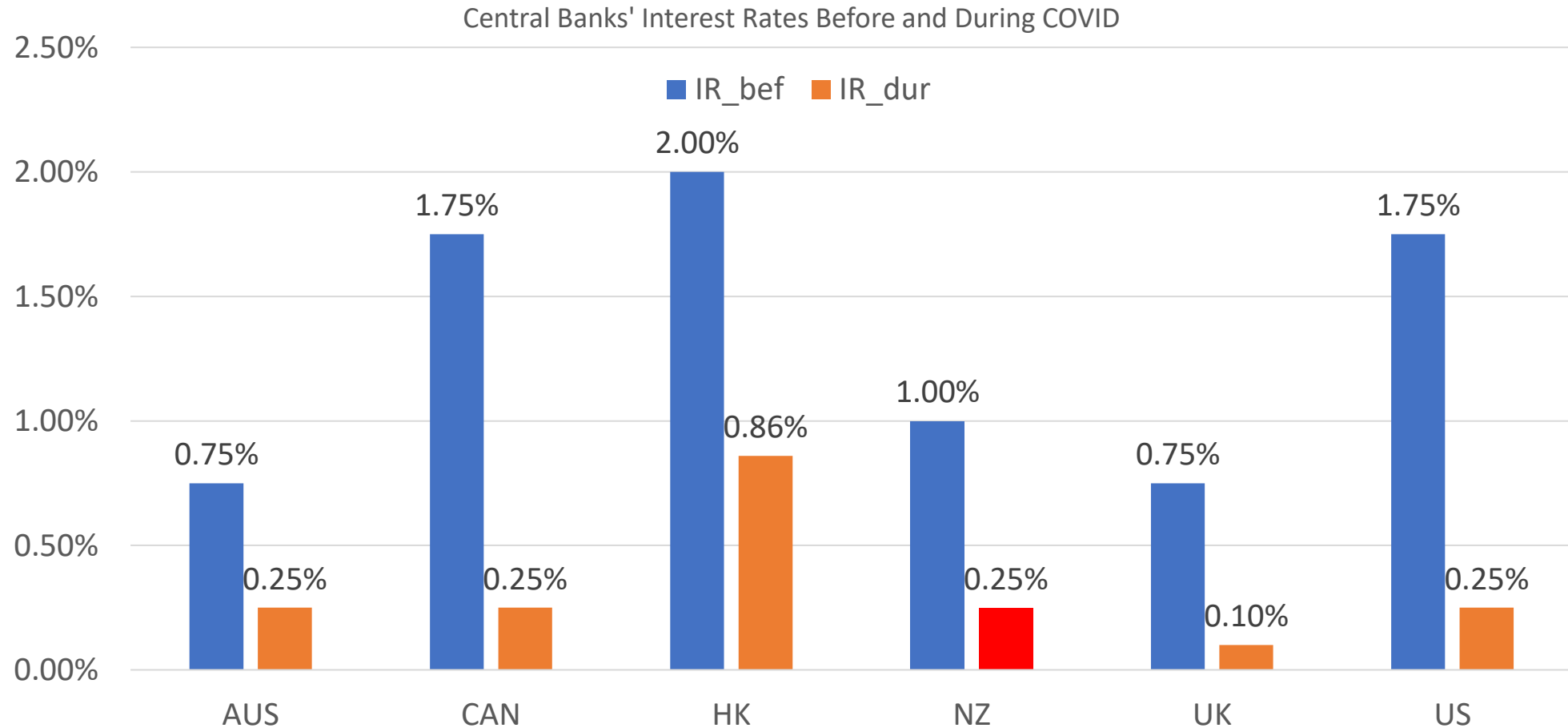


Most investors occupiers will need a 40% deposit to secure a property. Lenders can provide a maximum of 5% of new mortgage lending to investors at LVRs greater than 60 percent (those with less than a 40% deposit).

<https://www.rbnz.govt.nz/education/at-a-glance-series/lvr-restrictions-at-a-glance>

<https://www.rbnz.govt.nz/news/2020/04/reserve-bank-removes-lvr-restrictions-for-12-months>

# Central Banks' Interest Rates – Before and During COVID

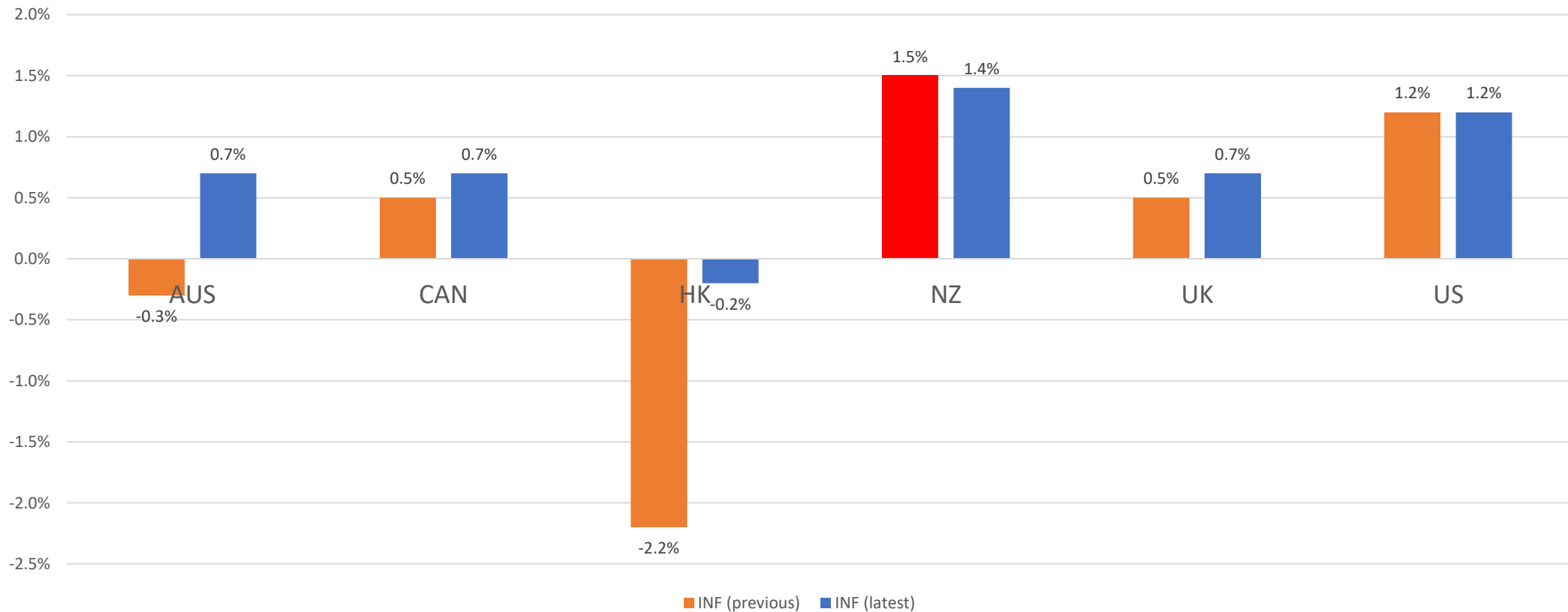


Changes in interest rates before (IR\_bef) and during (IR\_dur) the pandemic, source: Deloitte (2020)

# Inflation Rates Before and During COVID

Inflation Rates

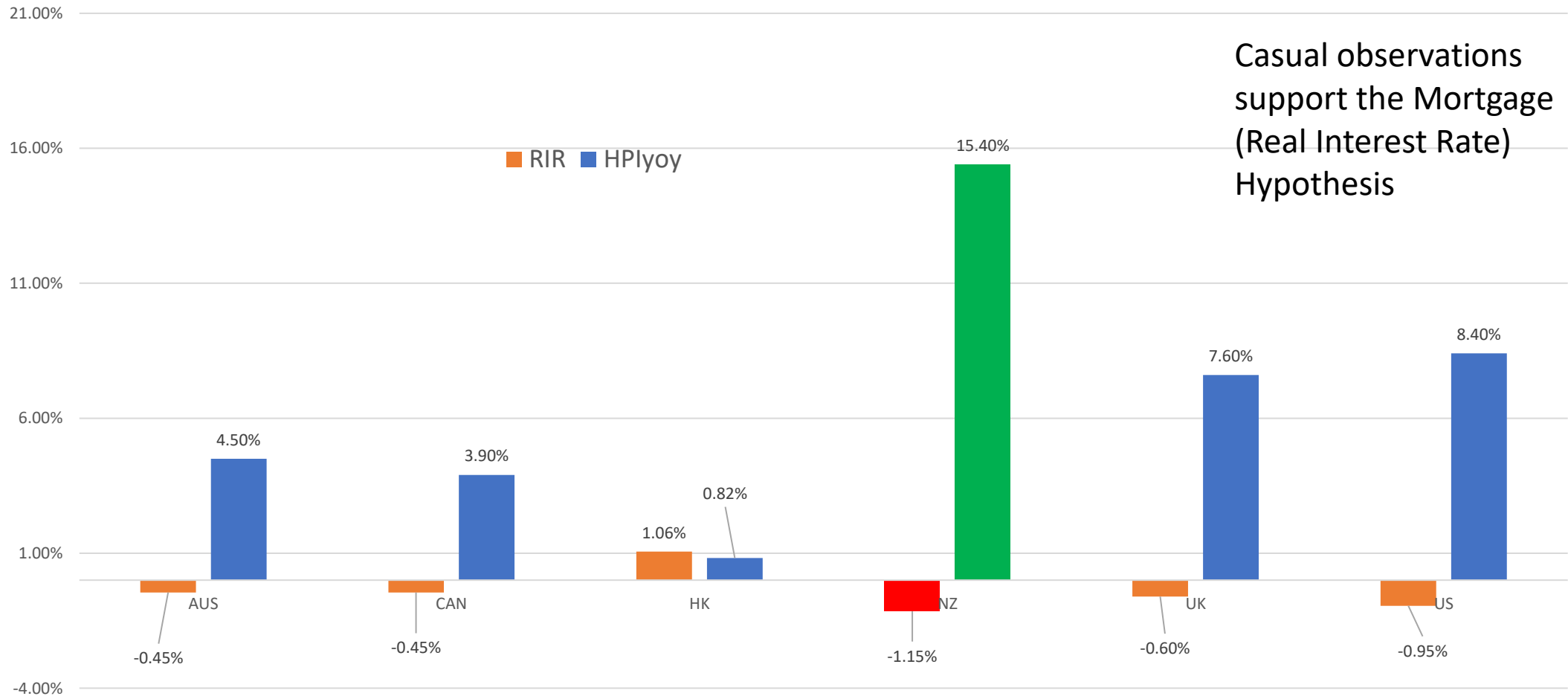
Most economies turned into higher inflation during COVID



The latest and previous inflation rates (INF) of the 6 economies (because the data is released on different dates, the data is not from the same month). AUS – 2020Q3, CAN, HK, UK, US – 202010, NZ – 202009. Source: Trading Economics



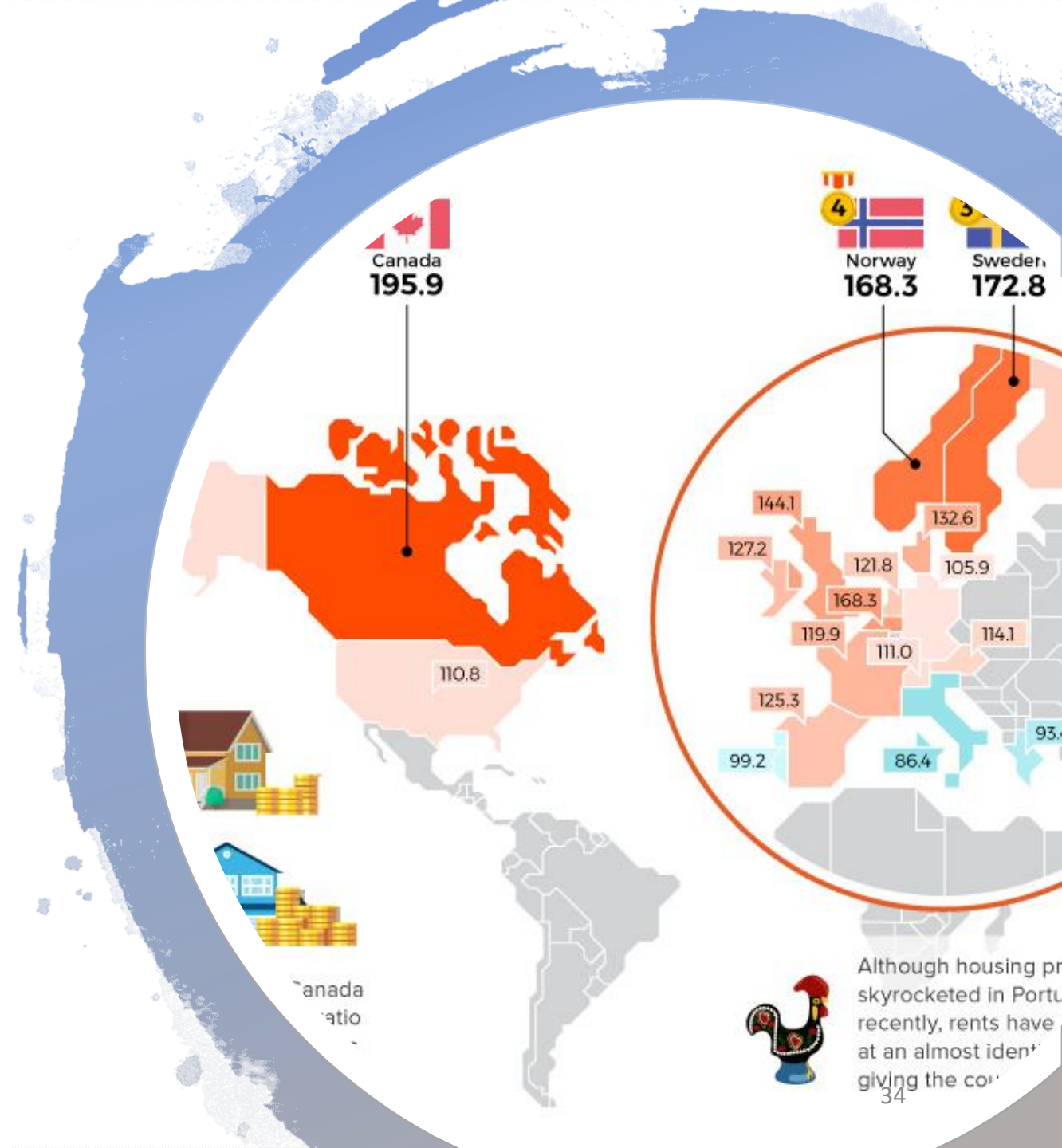
# Real Interest Rates & House Price Changes in COVID



The real interest rates (RIR) of the 6 economies (because the data is released on different dates, the data is not from the same month).

# Empirical Evidence of the RIR Hypothesis from the current COVID crisis

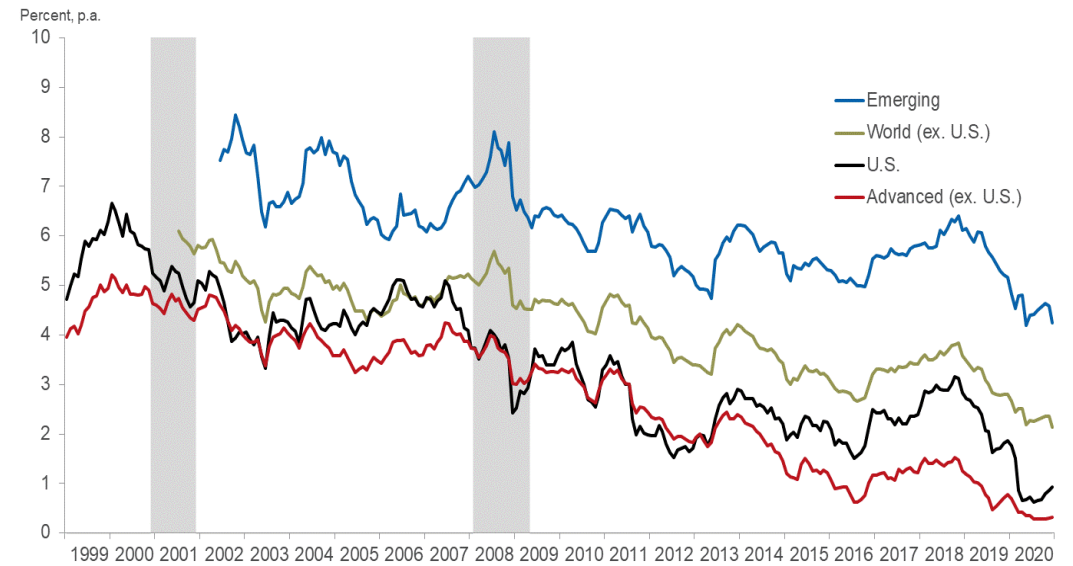
- <https://www.visualcapitalist.com/mappe-d-the-countries-with-the-highest-housing-bubble-risks/>



Although housing prices have skyrocketed in Portugal recently, rents have remained at an almost identical level, giving the country a low risk score.

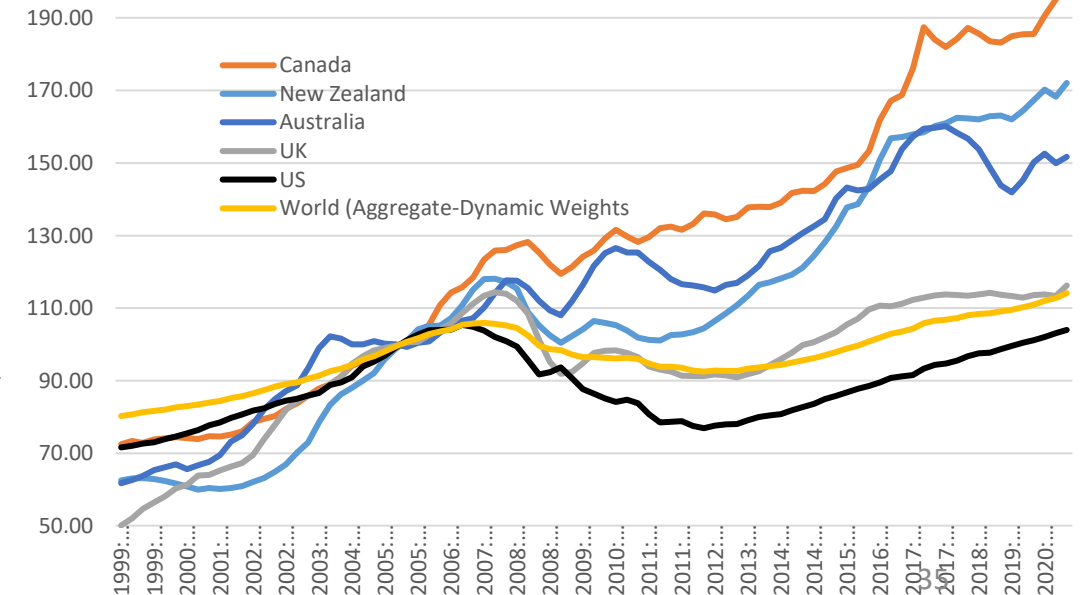
# Interest Rates and Global House Prices Data

Long-Term Interest Rates



NOTES: Calculations are based on a representative sample of 37 countries. Aggregated using U.S. trade weights. Argentina, Costa Rica and Indonesia are excluded due to lack of data. Shaded bars indicate global recessions (Grossman, Mack and Martínez-García (2015); "A Contribution to the Chronology of Turning Points in Global Economic Activity (1980-2012)," Journal of Macroeconomics, Vol. 46, pp. 170-185). Last updated April 2021.  
SOURCES: Database of Global Economic Indicators; Haver Analytics.

Global Real House Price Indices



- Global House Prices: Mack, A., and E. Martínez-García. 2011. "A Cross-Country Quarterly Database of Real House Prices: A Methodological Note." Globalization and Monetary Policy Institute Working Paper No. 99, Federal Reserve Bank of Dallas. <https://www.dallasfed.org/institute/houseprice#tab2>
- Long Term Interest Rate: <https://www.dallasfed.org/institute/dgei/ltrates.aspx>

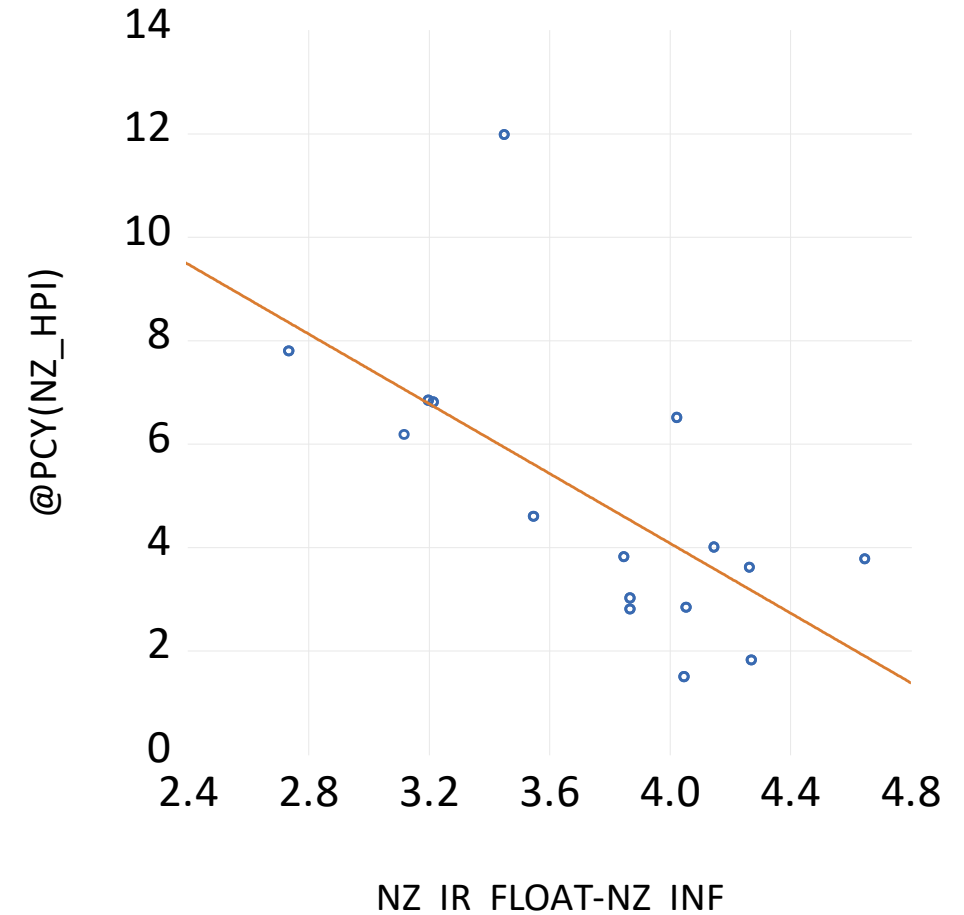
# Prelim Panel Results - 6 Economies 2017 -2020

Panel	Model 1	Model 2
Dep Var	HPI-YoY	HPI-QoQ
C	<b>6.346</b> (8.04) <sup>***</sup>	<b>0.017</b> (4.95) <sup>***</sup>
<b>RIR</b>	<b>-2.514</b> (-2.83) <sup>***</sup>	<b>-0.009</b> (-2.71) <sup>***</sup>
ΔGDP	<b>0.454</b> (2.52) <sup>**</sup>	<b>0.001</b> (2.39) <sup>**</sup>
ΔUNE	<b>-0.023</b> (-1.24)	<b>-0.015</b> (-0.58)
AR(1)	-	<b>0.253</b> (2.44) <sup>**</sup>
Fixed Effect	Cross-economy	
No of Obs	6 economies x 16Q (2017Q1 – 2020Q4)	
Adj R-sq	0.24	0.16

Figures in parenthesis are t-statistics, \*\*\* represents p-value ≤ 0.01

# Compare the Prelim Results of NZ and the 6E

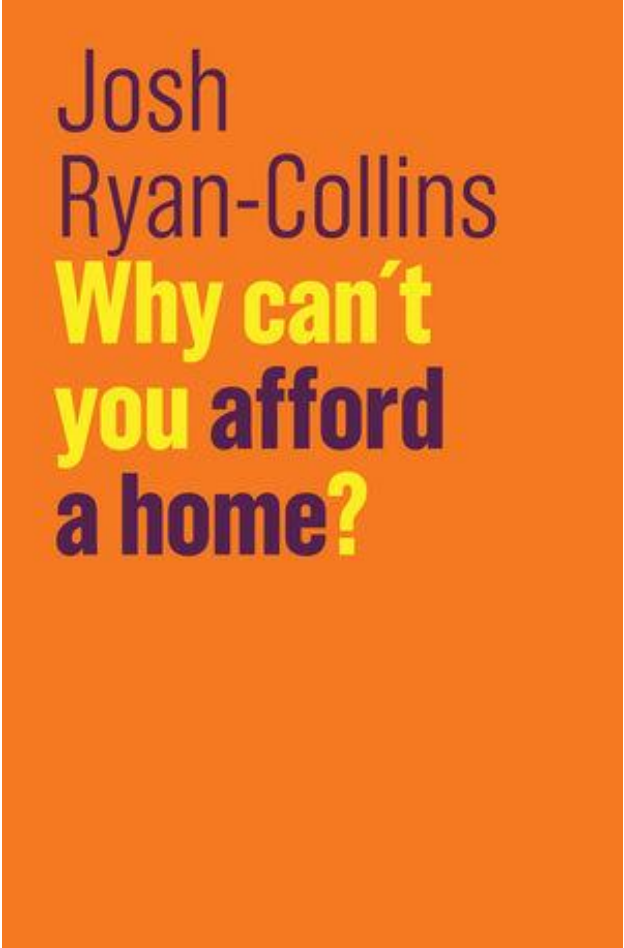
NZ	NZ Model 1	6 Econ Model 1
Dep Var	HPI-YoY	HPI-YoY
C	<b>20.04</b> (3.68) <sup>***</sup>	<b>6.35</b> (8.04) <sup>***</sup>
<b>RIR</b>	<b>-4.21</b> (-2.71) <sup>**</sup>	<b>-2.51</b> (-2.83) <sup>***</sup>
ΔGDP	<b>0.35</b> (0.66)	<b>0.45</b> (2.52) <sup>**</sup>
ΔUNE	<b>0.02</b> (0.19)	<b>-0.02</b> (-1.24)
No of Obs	16 (2017Q1 – 2020Q3)	
Adj R-sq	0.30	0.24



Figures in parenthesis are t-statistics, <sup>\*\*\*</sup>, <sup>\*\*</sup>, <sup>\*</sup> represent p-value ≤ 0.01, 0.05, 0.10 respectively

# Why Can't You Afford a Home?

- 'Why can't you afford to buy a home? It's not because of ... too little land, but **too much bank lending.**'
  - Steve Keen,
    - author of *Debunking Economics*
- “**Unlimited credit and money flows** into an inherently finite supply of property, which causes rising house prices – a **housing-finance feedback cycle**”
  - Josh Ryan-Collins,
    - author of *Why can't you afford a home?*

The image shows the cover of the book 'Why can't you afford a home?' by Josh Ryan-Collins. The cover has a solid orange background. The author's name 'Josh Ryan-Collins' is at the top in a dark purple font. Below it, the title 'Why can't you afford a home?' is written in a bold, sans-serif font. 'Why can't' is in yellow, 'you afford' is in dark purple, and 'a home?' is in a lighter purple. The overall design is clean and modern.

Josh  
Ryan-Collins  
**Why can't  
you afford  
a home?**

# Conclusions

- House price rise is a global phenomenon, its cause is likely to be a shock common to many economies during COVID;
- It's unlikely to be caused by local issues, such as tax policy, house supply, etc;
- A cut to an unprecedented low interest rate and a lax monetary policy is common to the OECD economies during COVID;
- A cross-economies panel analysis confirms a negative association between real interest rates and house price rises;
- Real interest rate does not only affect the borrowing cost, but it is also a benchmark for the required rate of return.