

After the recession should we expect fundamental changes in the positive drivers of recent Australian economic growth?

What does the longer run future look like?

R G Gregory

Economics ANU

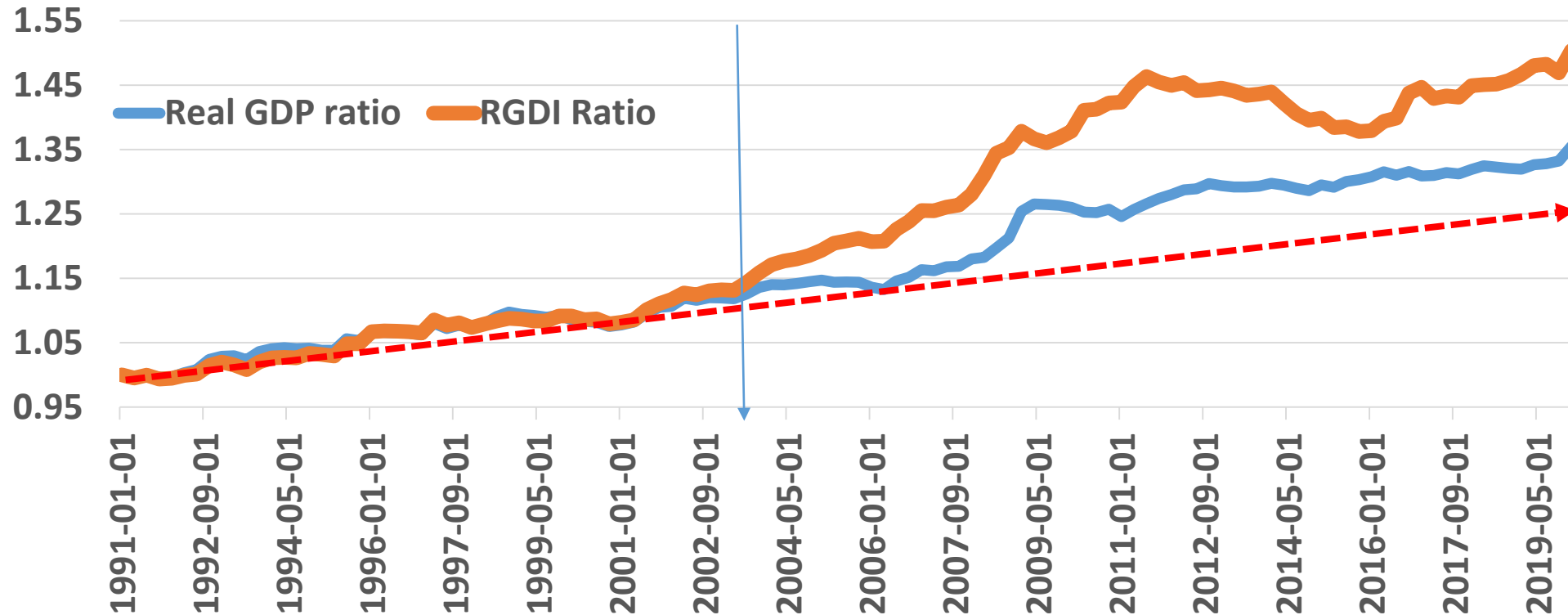
The questions posed – vital policy areas

- ❑ What will happen when Chinese demand for exports is no longer a major driver of Australian economic growth and living standards? - Chinese exports accounted for **half** of all export growth over last two decades. I have never experienced a period, like today, where politics and economics have been in so much conflict!!
- ❑ What will happen if immigration inflows are reduced? Immigrants - accounted for **all** additional full-time jobs over the last decade and a half held by those 15-40 years, ?
- ❑ Will the Australian labour market continue its half century growth path - part-time job growth accounting for **half** of all jobs created?
- ❑ Will women employed in the labour market continue to work **nine to ten hours less** per week than men? - as they have done for over half a century?

Australia RGDP and RGDI ratio to average of selected countries RGDP Index

Germany, US, Canada, UK

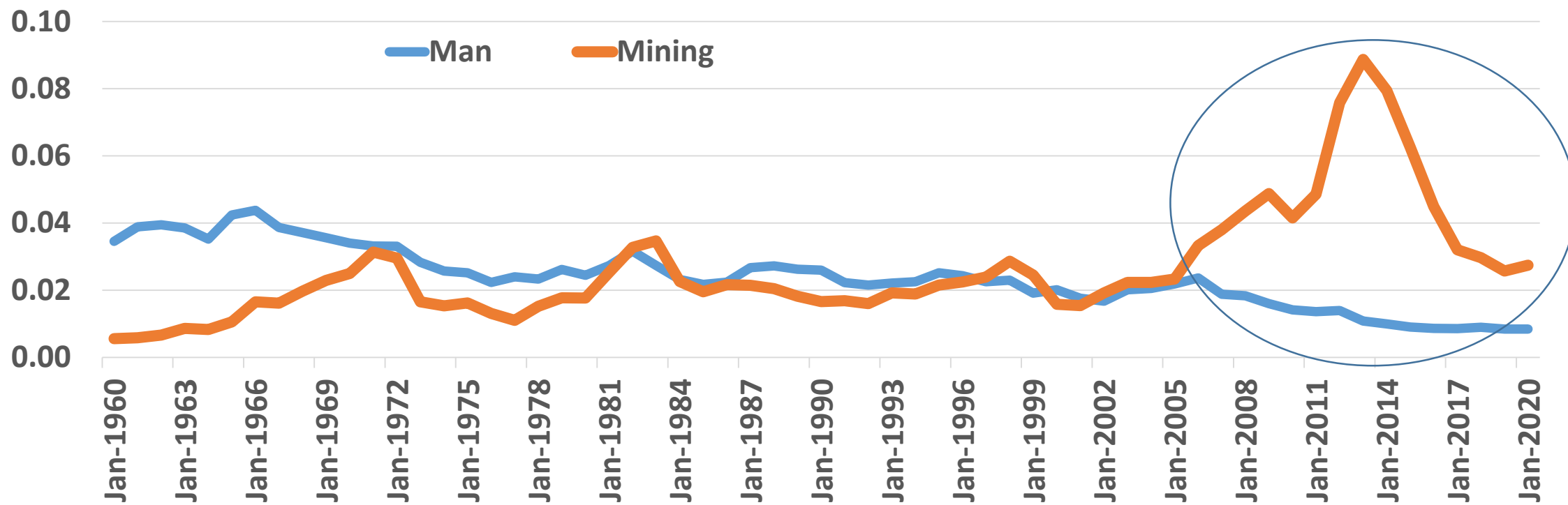
1991 = 1.00



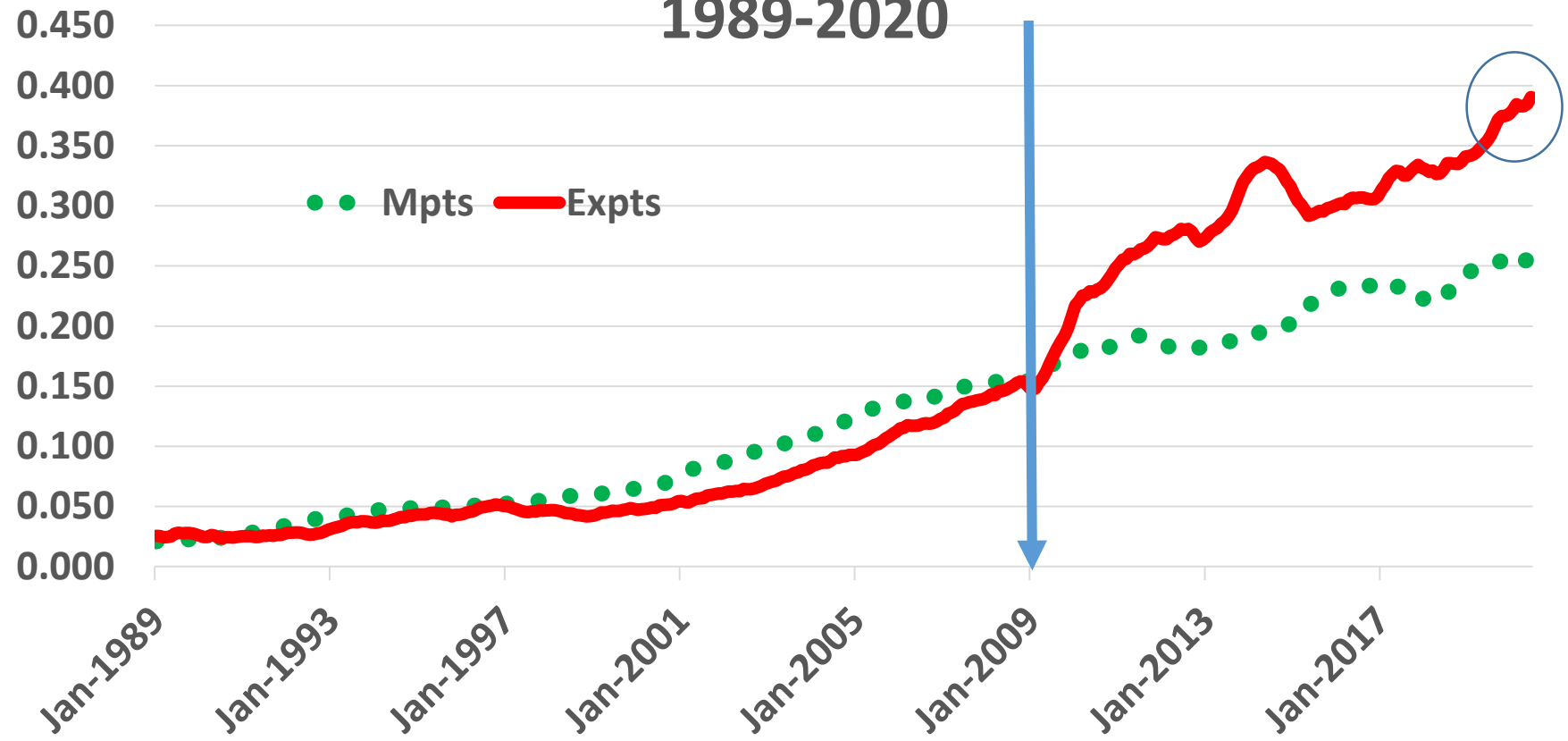
Manufacturing and Mining Investment Shares of GDP

Current prices

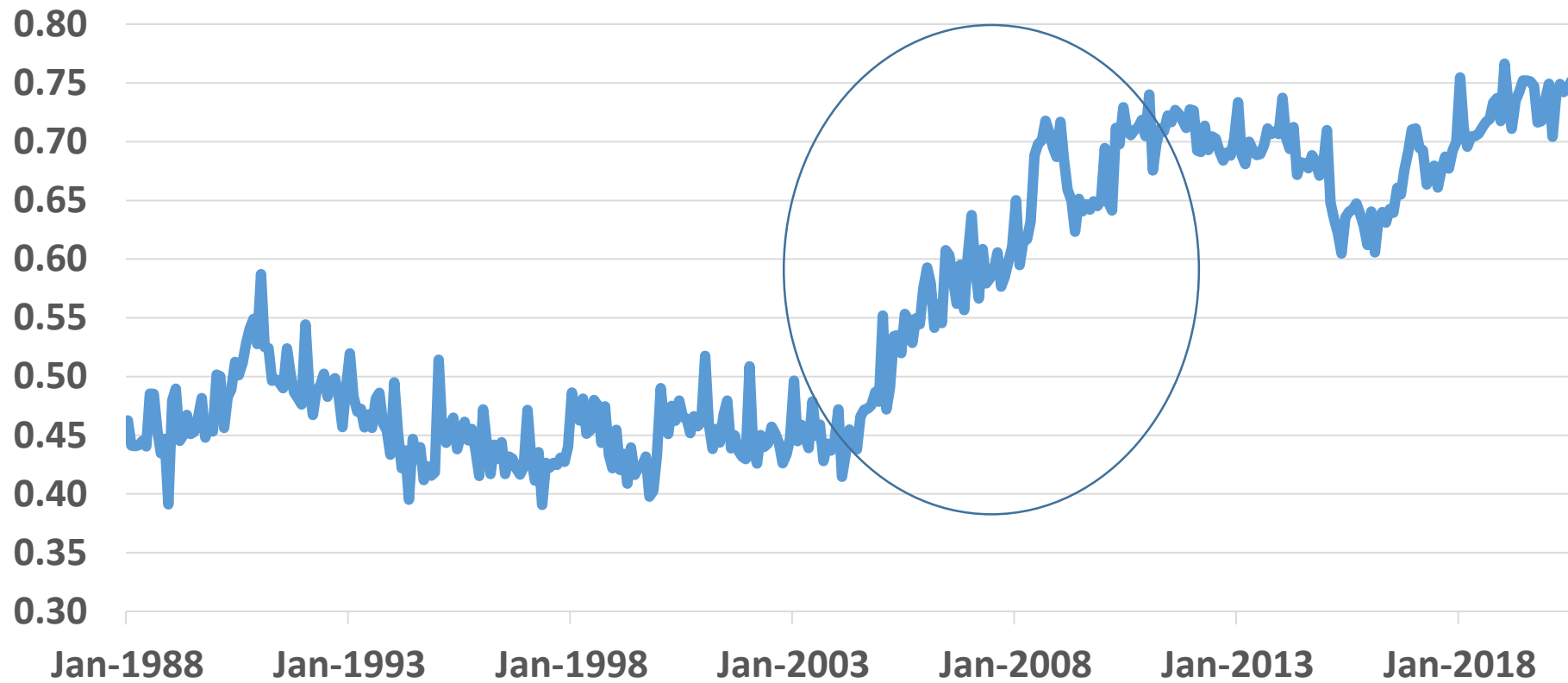
1961-2020



Chinese Imports and Export Shares of Australian International Goods trade 1989-2020

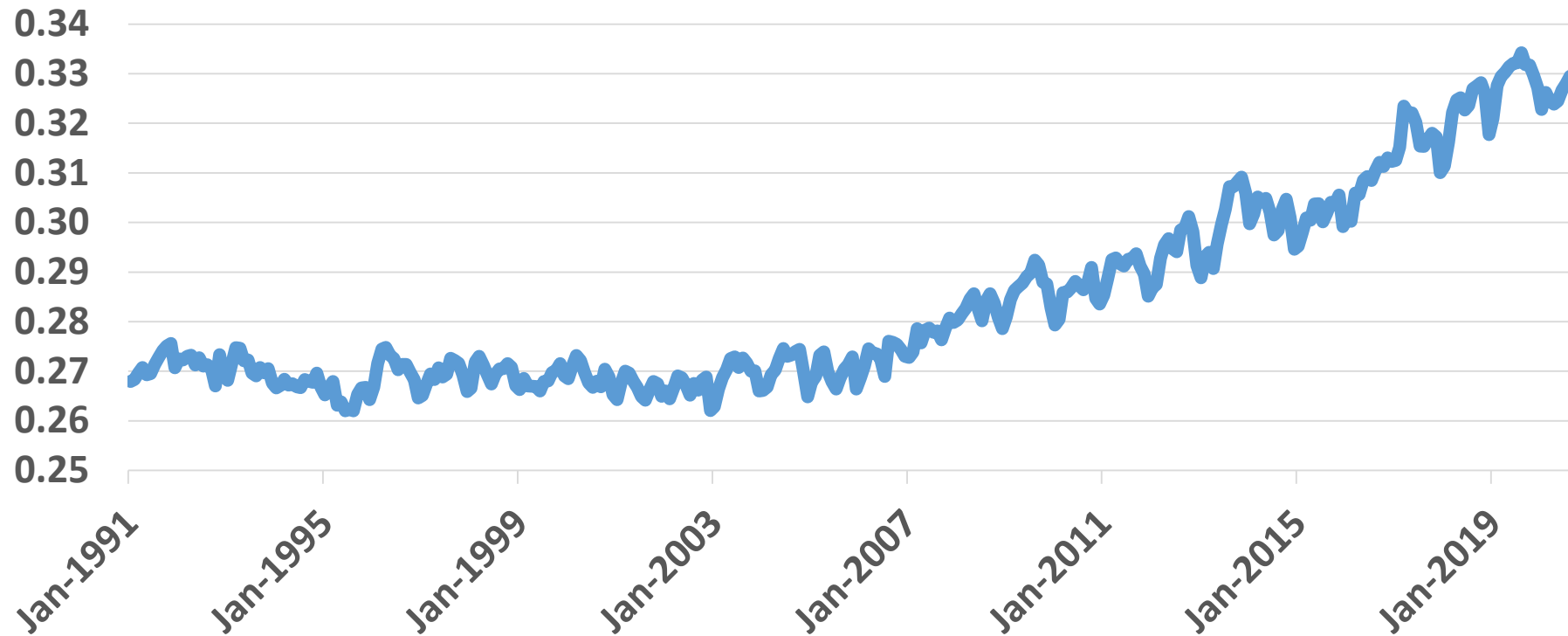


Mineral Related Exports as a Share of total Exports 1988-2020

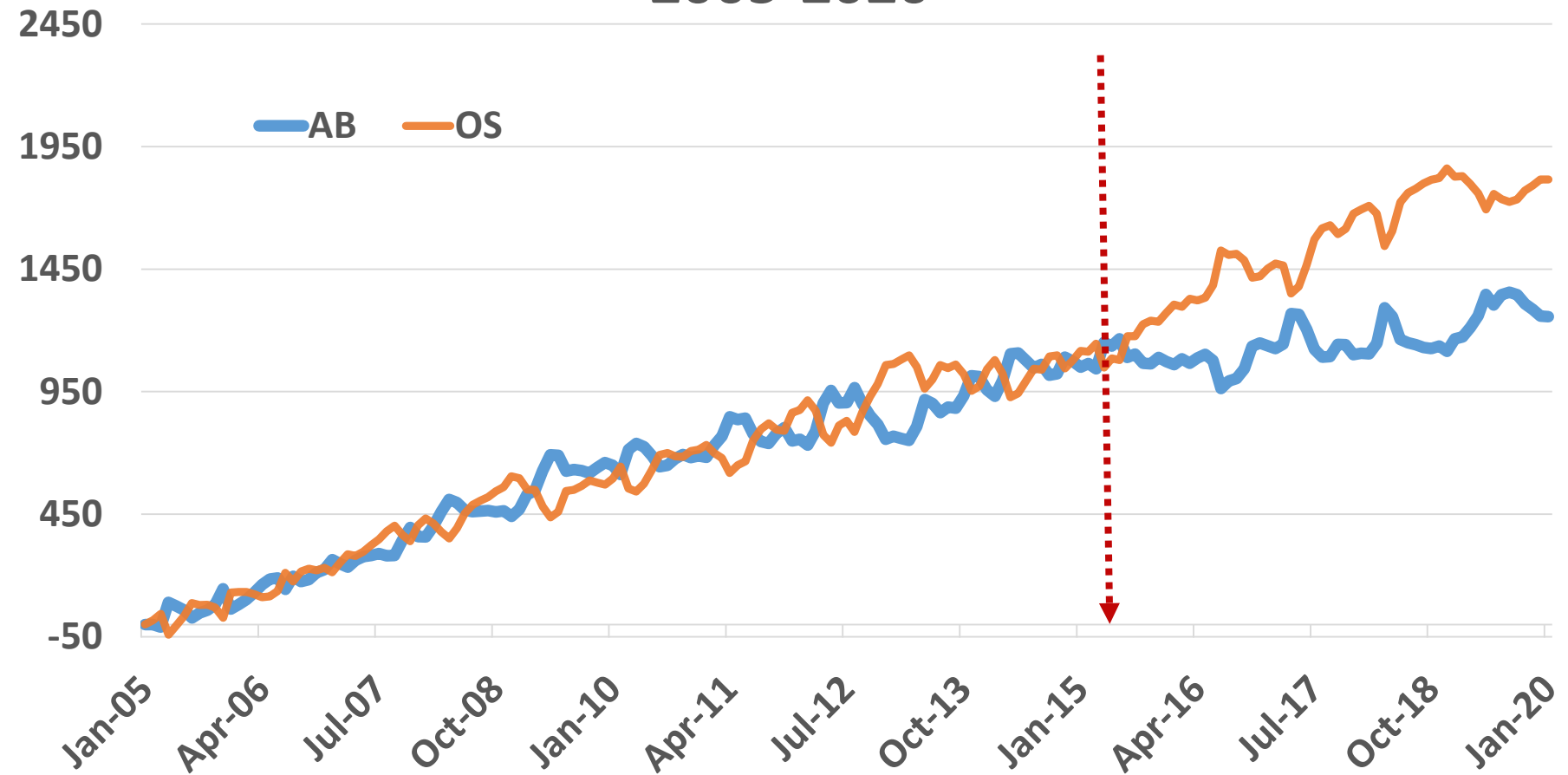


Rapid Australian-Chinese
trade generated rapid
population growth under
new immigration scheme

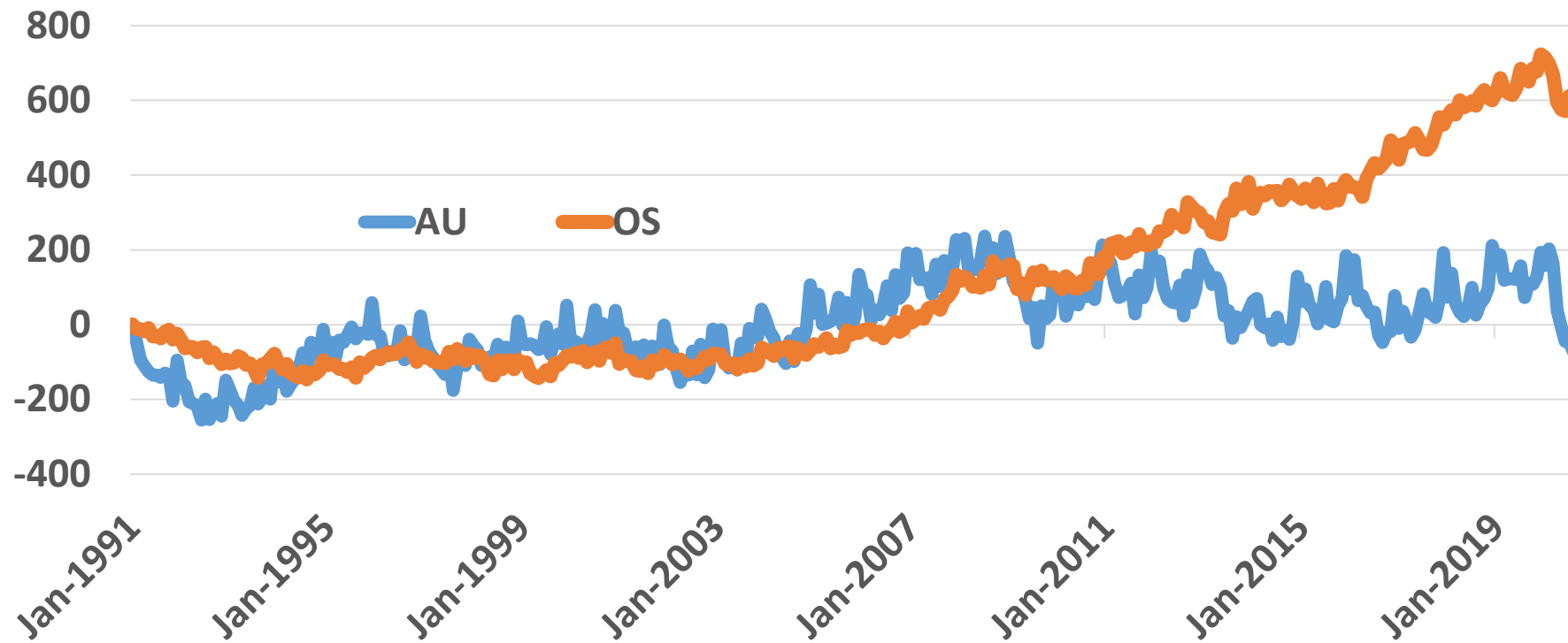
OS Born as a proportion of the total Population 15-64 years



Population Growth 15-64 years AU and OS Born 2005-2020



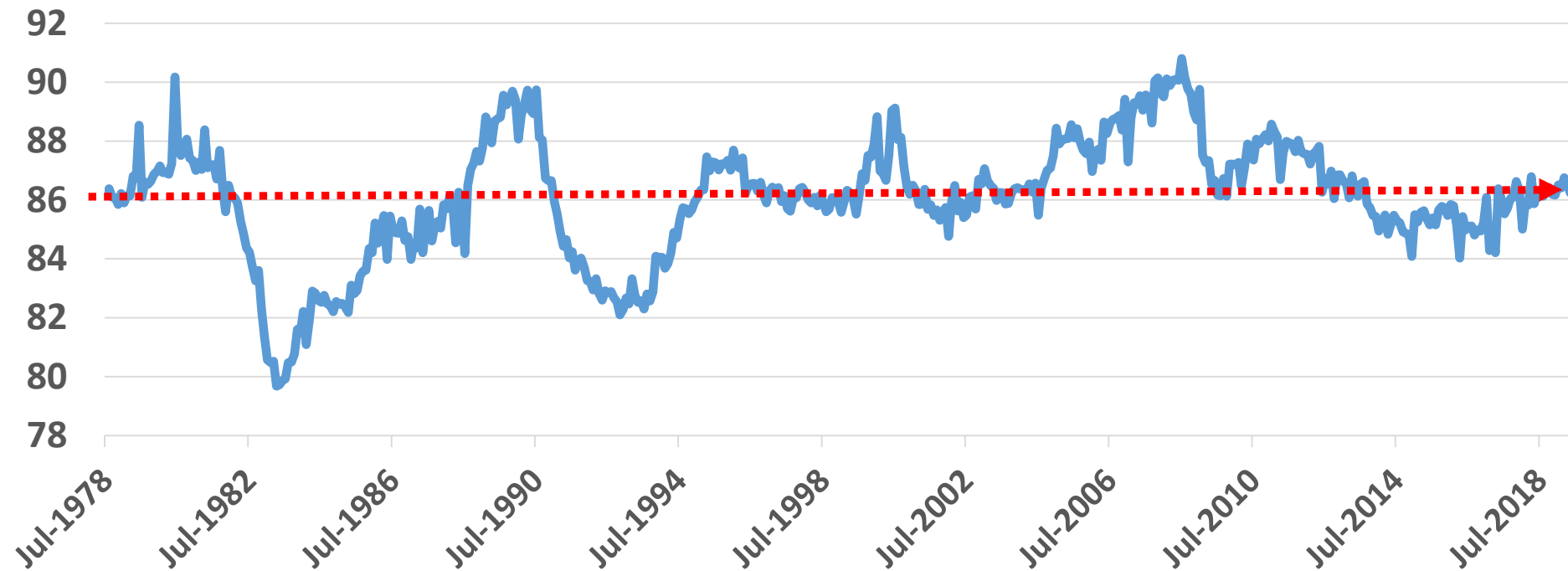
Change in Full Time jobs: 15-40 years of age 1991 to 2020 (ooo's)



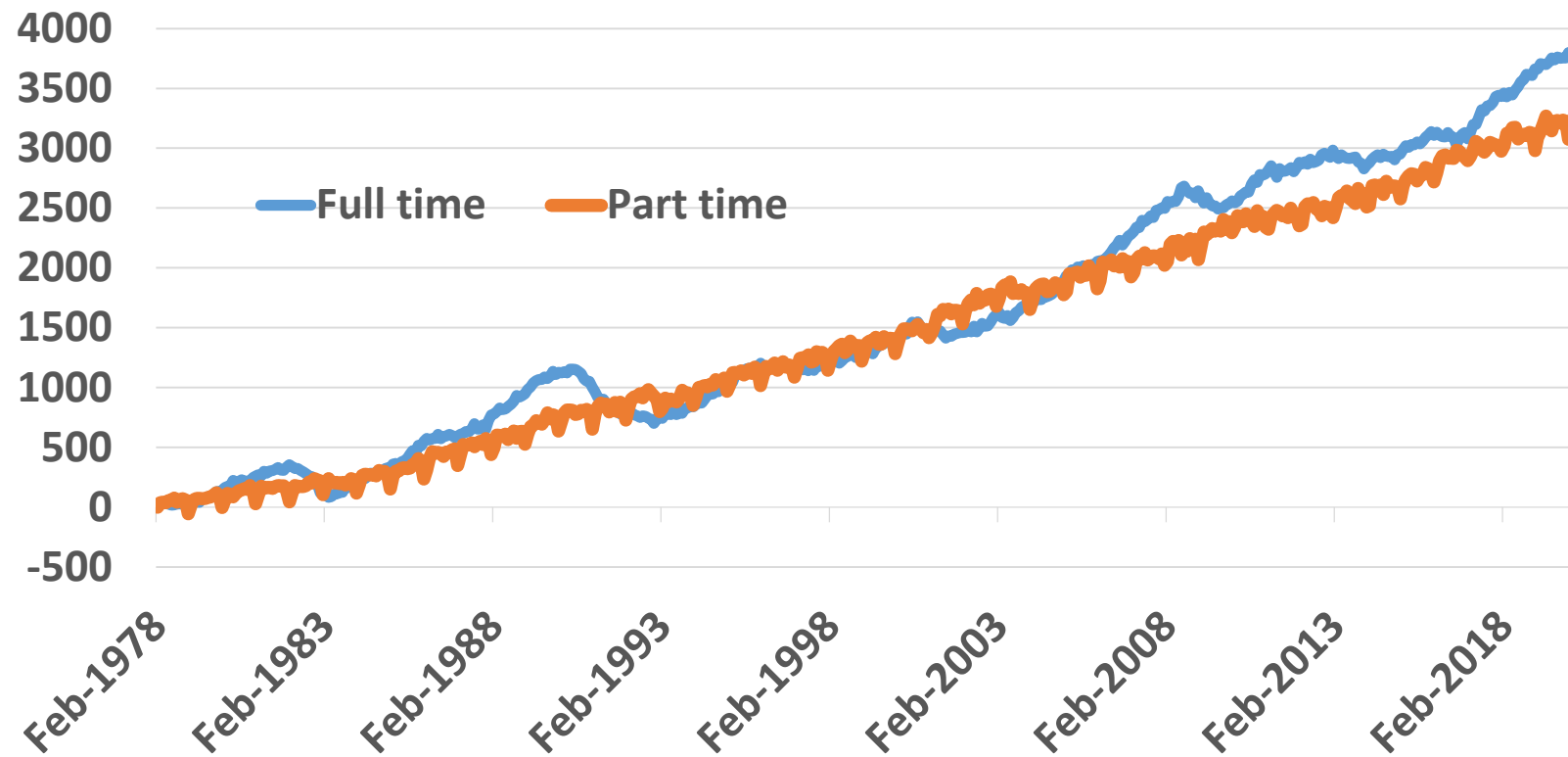
Do we need to think more about work hours per week?

The strange dichotomy between hours worked per week of the population compared to hours worked per week of those employed.

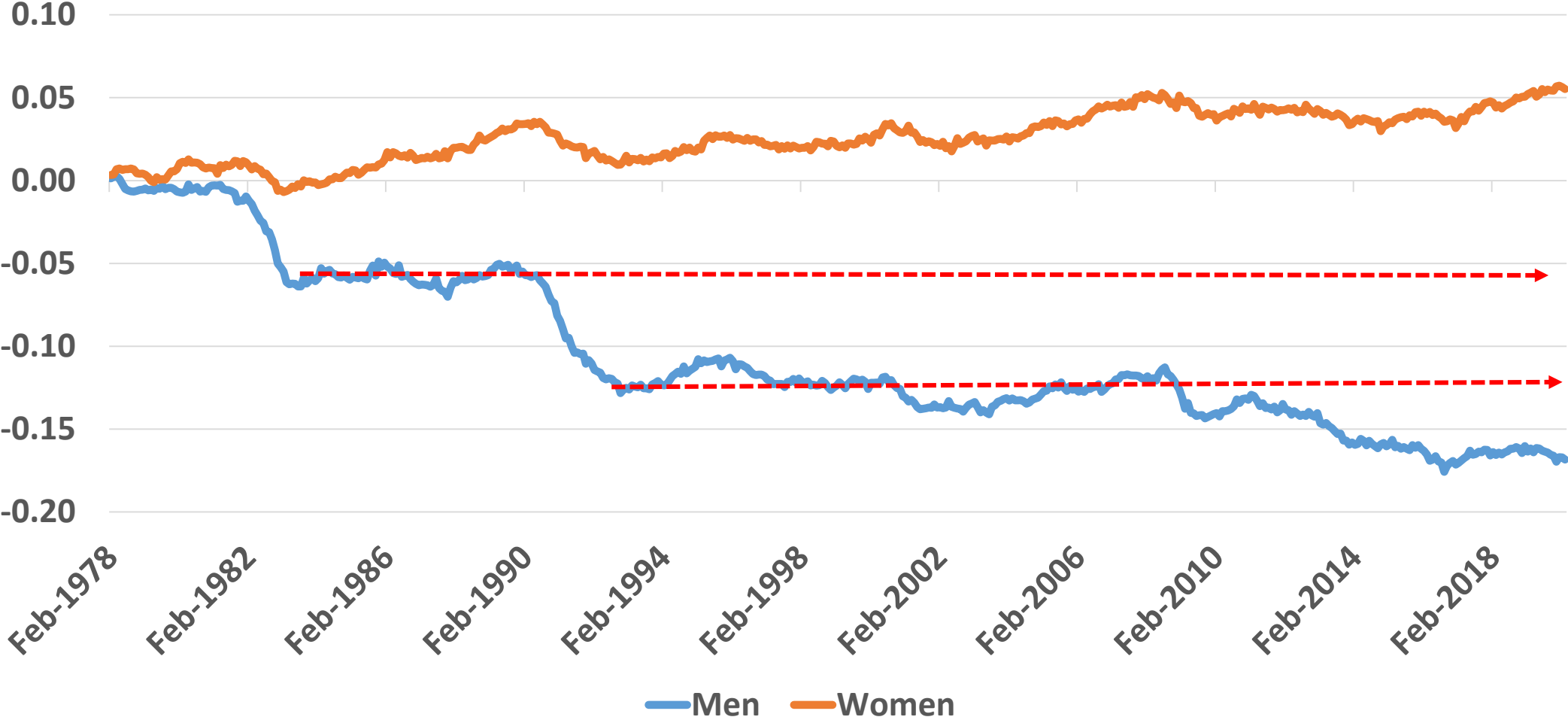
**Figure 1. Average Monthly Hours Employed
in the Labour Market per Head of
Population 16 years+**



Absolute Change in Full and Part-time employment (ooo's) 1978-2020

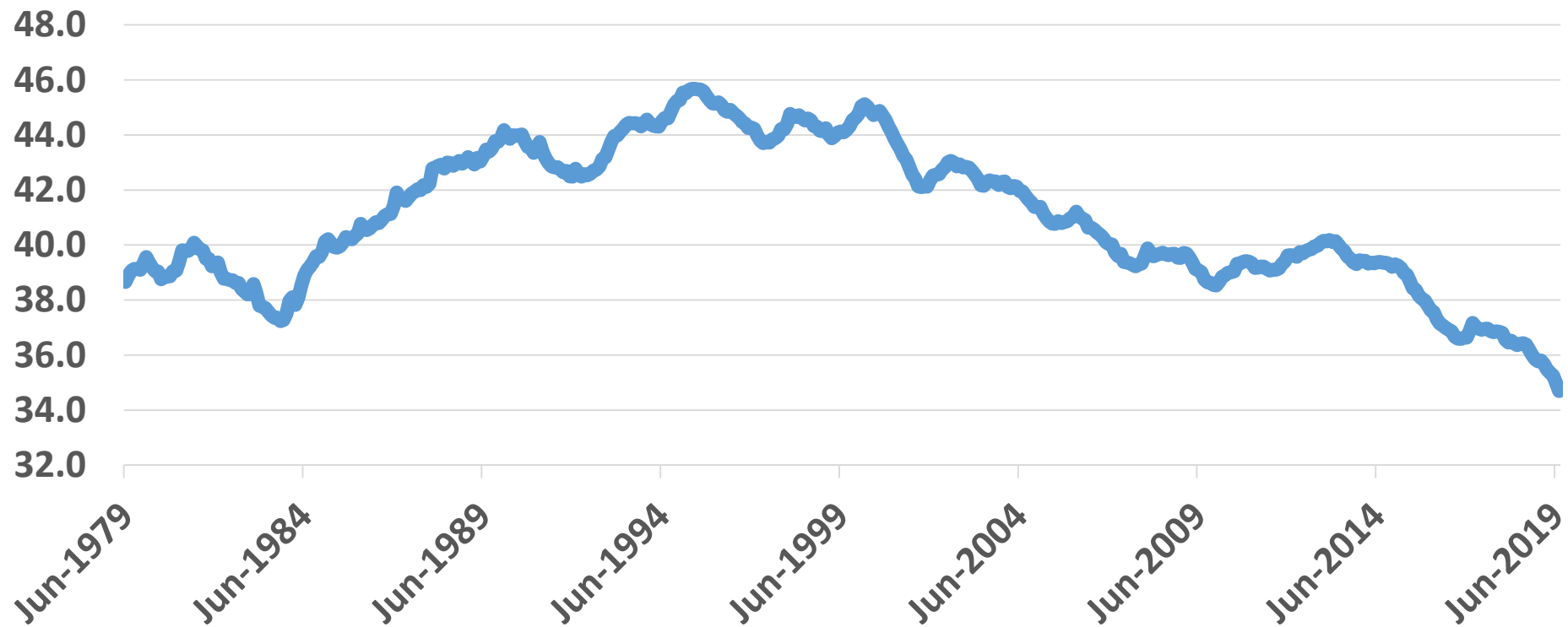


Change in Male and Female Full-Time Jobs since 1978

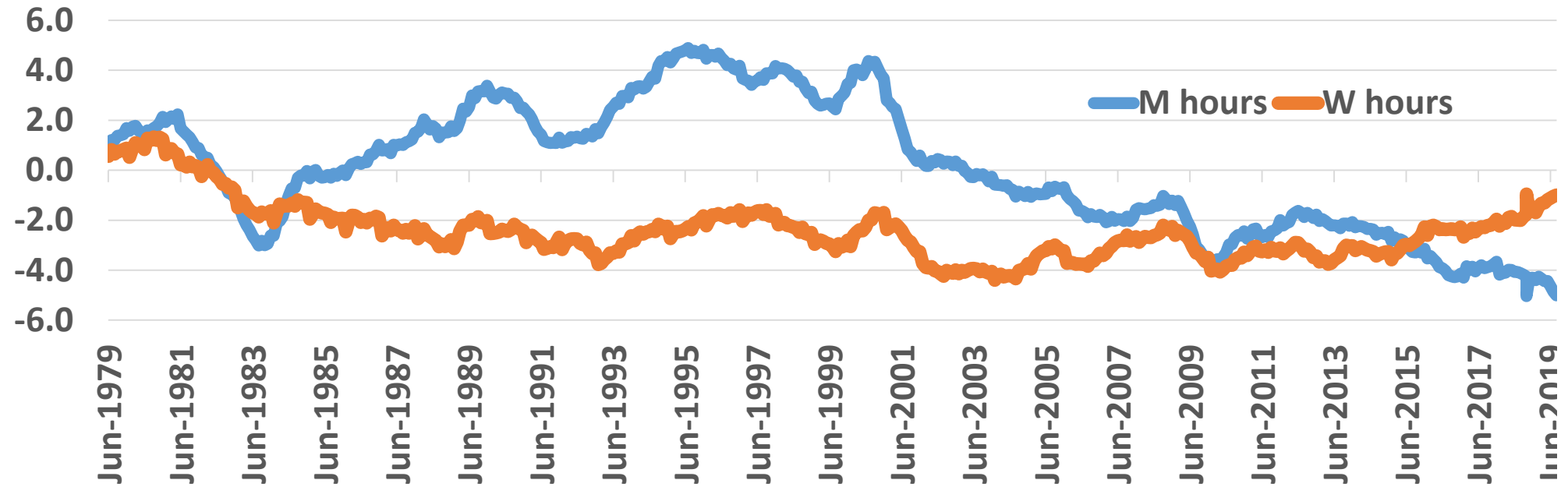


		Job Tenure to Date		
Duration			P Time	F Time
Less than 1 year			0.24	0.16
1 year to 2			0.24	0.21
2 years to 5			0.19	0.22
5 years to 10			0.10	0.12
10 years to 20			0.14	0.18
20+ years			0.09	0.11

Monthly Hours gap between employed Men and Women 1978-2019



Change in Monthly Hours Worked Employed Men and Women 1978-2019



Harnessing productivity gains post COVID-19: Structural change implications for the Australian economy

Associate Professor Janine Dixon
Centre of Policy Studies, Victoria University

Queensland Productivity Commission Livestream
Productivity reform in Australia and New Zealand: Barriers and
opportunities

November 24, 2020

- Part 1: Basic model to illustrate
 - The attraction of productivity growth
 - The risks associated with productivity growth
- Part 2: The pandemic
 - 5 economic features of the pandemic
 - Productivity impact so far
 - Potential productivity impact
- Part 3: How can policy help?

Part 1: A mini CGE model

	Definition	Reduced form (short run) <i>Real wage and capital fixed</i>	Reduced form (long run) <i>Real rental and labour fixed</i>
		Shocks: $a_L < 0$; $f > 0$; $a_K = 0$	
Production function	$y = S_L(l - a_L) + S_K(k - a_K)$ <div>$S_L = \text{labour share} = 0.6$; $S_K = \text{capital share} = 0.4$</div>	$y = -\sigma \frac{S_L}{S_K} a_L$	$y = -a_L$
Cost-minimizing inputs	$l - k = -\sigma(w - q) + (1 - \sigma)(a_L - a_K)$ <div>$\sigma = \text{CES substitution elasticity} = 0.4$</div>	$l = \left(1 - \frac{\sigma}{S_K}\right) a_L$	$k = -a_L$
Zero pure profits	$p = S_L(l + a_L) + S_K(k + a_K)$	$q = ?$	$w = ?$
Demand	$y = -\varepsilon p + f$ <div>$\varepsilon = \text{demand elasticity} = 1$? $f = \text{demand shift}$</div>	$p = \frac{\sigma S_L}{\varepsilon S_K} a_L + \frac{f}{\varepsilon}$	$p = \frac{a_L}{\varepsilon} + \frac{f}{\varepsilon}$
Real wage	$rw = w - p$	fixed	$rw = -a_L$
Real capital rental	$ror = q - p$	$ror = -\frac{S_L}{S_K} a_L$	fixed

A mini CGE model

	Reduced form (short run) <i>Real wage and capital fixed</i>	Reduced form (long run) <i>Real rental and labour fixed</i>	<i>A negative shock to a_L: productivity improvement</i>
	Shocks to a_L and f only		
Production function	$y = -\sigma \frac{S_L}{S_K} a_L$	$y = -a_L$	Unambiguously good for output, implies good for GDP, tax revenue, and politicians!
Cost-minimizing inputs	$l = \left(1 - \frac{\sigma}{S_K}\right) a_L$	$k = -a_L$	Short run: unclear + or – impact on labour. Long run: good for capital growth
Zero pure profits	$q = ?$	$w = ?$	
Demand	$p = \frac{\sigma S_L}{\varepsilon S_K} a_L + \frac{f}{\varepsilon}$	$p = \frac{a_L}{\varepsilon} + \frac{f}{\varepsilon}$	First term (a_L): currency devalues, competitiveness improves. Second term (f): induced income effect, currency appreciates
Real wage	fixed	$rw = -a_L$	Long run: good for wages
Real capital rental	$ror = -\frac{S_L}{S_K} a_L$	fixed	Short run: good for profits

A mini CGE model with industries

	Reduced form (short run) <i>Real wage and capital fixed</i>	<i>A negative shock to a_L: productivity improvement</i>
	Shocks to a_L and f only	
Production function	$y_i = -\sigma \frac{S_L}{S_K} (a_L - (p_i - p))$	Unambiguously good for output, industries with elastic demand expand more
Cost-minimizing inputs	$l_i = \left(1 - \frac{\sigma}{S_K}\right) a_L + \frac{\sigma}{S_K} (p_i - p)$	Short run: better for labour in industries with elastic demand
Demand	$(p_i - p) = \frac{\sigma S_L \left(1 - \frac{\varepsilon_i}{\varepsilon}\right)}{\sigma S_L + \varepsilon_i S_K} a_L + \dots f$	Industry price response relative to average depends on industry elasticity. Highly elastic: $p_i - p \rightarrow -\sigma \frac{S_L}{S_K} a_L > 0$; Perfectly inelastic: $p_i - p = a_L < 0$
Real wage: ECONOMY WIDE	fixed	Long run: good for wages
Real capital rental: INDUSTRY SPECIFIC	$r \text{ or } r_i = -\frac{S_L}{S_K} a_L + \frac{1}{S_K} (p_i - p)$	Short run: good for profits for industries with elastic demand; bad for profits for industries with inelastic demand. Driver of investment change and long run structural change.

Economy-wide, uniform increase in labour-saving productivity:

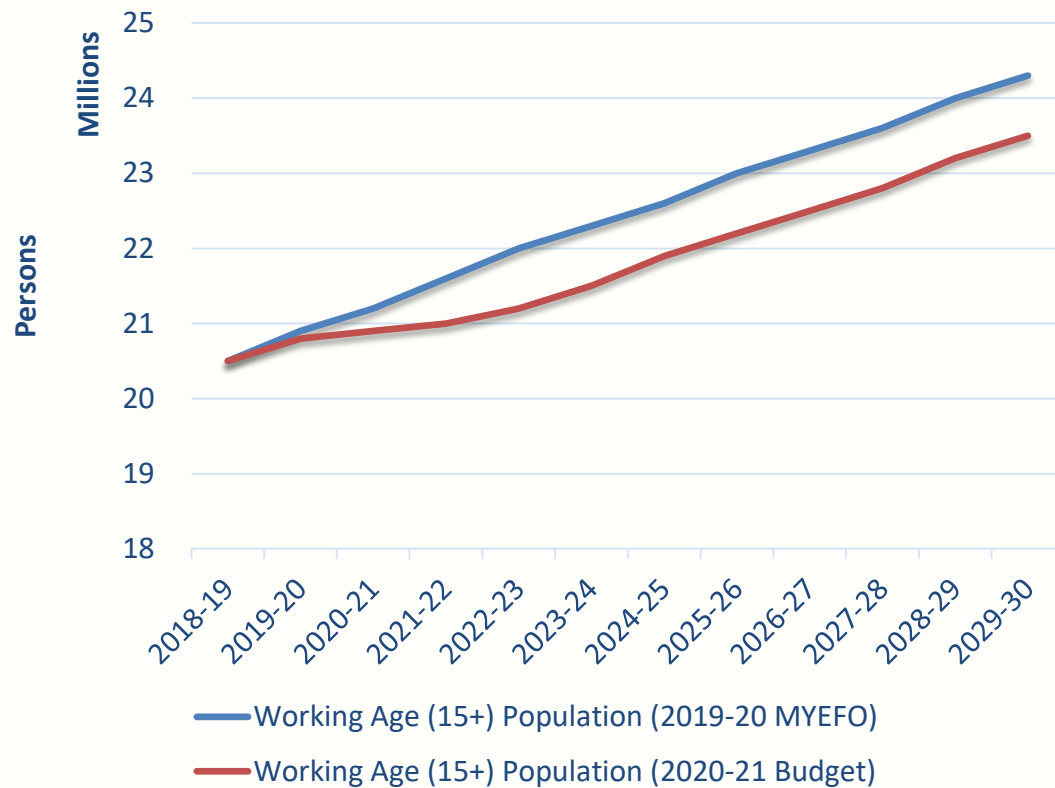
- output and profits increase in the short run
 - Impact on industry employment depends on demand elasticity
- output, investment and real wages increase in the long run
 - if rates of return are fixed, i.e. no rent-seeking
- Impact on currency is not clear
 - Depends on pass-through to domestic incomes
- Industries with elastic demand will expand more: employment increases
 - Trade exposed
- Industries with inelastic demand expand less: employment may be replaced by technology
 - Government services
 - Household essentials

Part 2: Five economic impacts of Covid-19

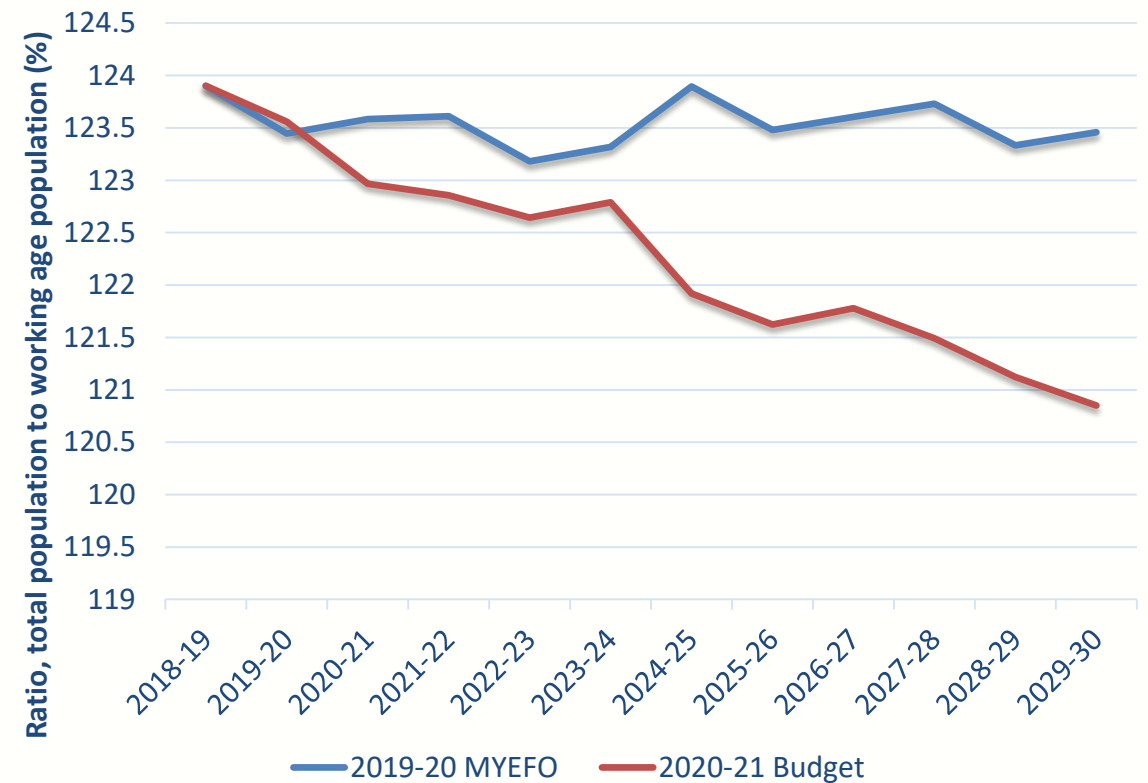
1. Productivity:
 - Negatives: working from home, school closures, inefficiencies derived from additional hygiene requirements and social distancing
 - Positives: working from home, less business travel, online ordering, telehealth
 - Illusory: increase in output per worker from temporary compositional change
 2. Domestic demand: Social distancing affects public and private consumption of many commodities
 3. International demand: General slowing of world economy affects all exports, travel bans impact tourism, international students
 4. Fiscal: JobKeeper, JobSeeker and other support measures, modelled as transfers and wage subsidies
 5. Population: slowing net international and net interstate migration
 - Will lose approx. 4 years of growth
 - Dependency ratio to fall approx. 2.5 per cent
- *Difficult to isolate individual impacts*
 - *Impacts will unwind at different rates, some will be permanent*

Population growth revisions

Working age population



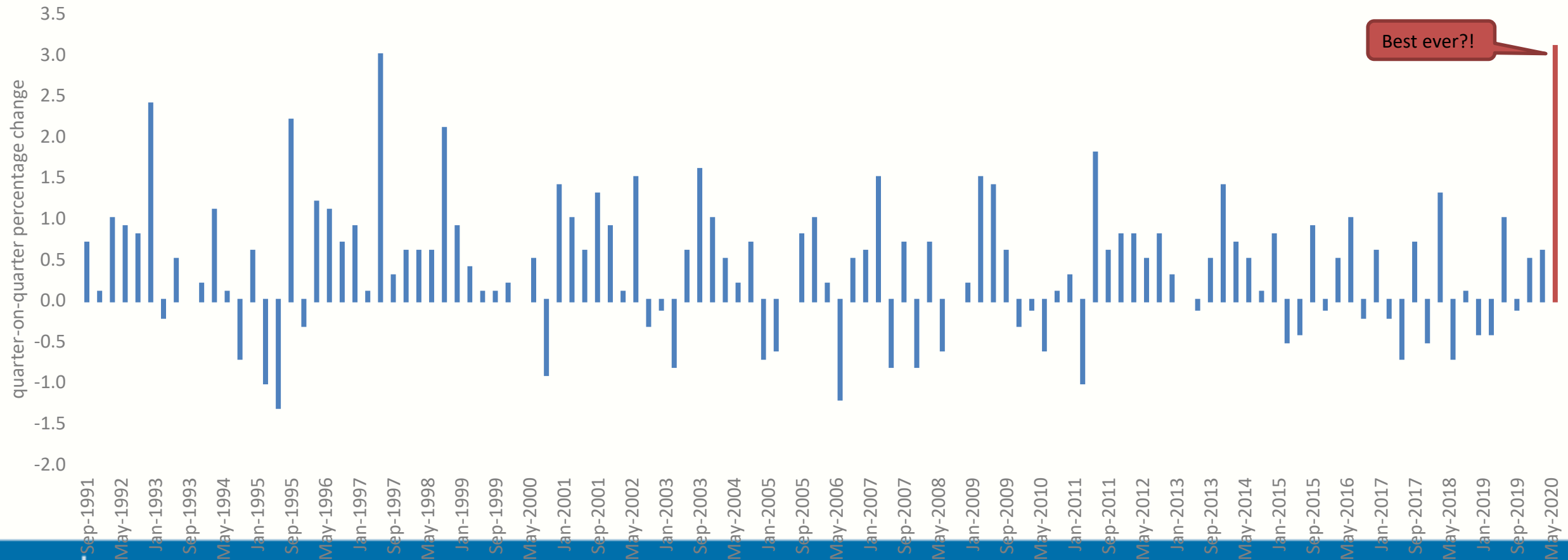
Dependency ratio



Productivity growth?

Large productivity impact due to temporary compositional change (loss of low wage jobs): job losses concentrated on young workers in hospitality, retail account for ~1.5% at least – a “normal” year

GDP per hour worked: Index - Percentage changes ;



Source of productivity change	Direct impact	Wider economic impact
Remote working, on line services	↑ hours per person, ↑ leisure time	↑ output, temp ↑ UER, temp ↑ ROR, permanent ↑ K
Less business travel	↓ use of accommodation, restaurants, air transport	Productivity ↑, more for industries with more travel. Demand for accom, restaurants, travel ↓
Less bricks and mortar real estate – e.g. on line shopping, telehealth, tele-gov services, banking, tertiary education	↓ non-residential building in investment Revaluation of housing – proximity to CBD ↓, home office ↑ Less commuting – revaluation of public and private transport infrastructure	Productivity ↑, temp ↑ ROR Demand for NR building ↓
More use of computer and internet services, efficiency gain	↑ computer services as input to production (productivity loss); ↑ primary factor productivity for net average productivity improvement	Productivity ↑ Demand for computer services ↑
Less retail trade margin, more wholesale margin	↓ retail as margin on hh consumption ↑ wholesale as margin on hh consumption ↓ wholesale productivity ↑ hh usage of postal services	Overall productivity ↑, CPI ↓
Overall		<ul style="list-style-type: none"> • Clear productivity improvement • GDP increase • $Y = C + I + G + (X - M)$: <ul style="list-style-type: none"> • Balance of Trade surplus • Consumption increase • Investment increase • Unclear impact on aggregate employment • Real wage increase • Industries and occupations: specific and macro impacts

Industry and occupation impacts

- Specific impacts:
 - Negative: Accommodation, restaurants, air transport
 - Negative: Retail
 - Positive: Computer services
 - Positive: Wholesale, delivery
 - Negative: non-residential construction
 - Positive: residential construction, construction services
- Inelastic demand: government jobs, household necessities
 - Jobs replaced by technology: public administration, health care, utilities, agriculture
- Elastic demand
 - Technology-driven cost reductions and increase in incomes increase output and employment: accommodation, restaurants, air transport, retail, residential construction, mining, agriculture

Part 3: Implications

Cohort	From...	Into...	Policy Issues
Low wage, low age	Retail	Wholesale, Hospitality	Geographical location (suburban retail vs industrial wholesale); Hospitality: strong underlying growth and income boost will outweigh business travel impact
Construction	Non-residential Civil engineering	Residential Communications	Retraining Stranded assets Revaluation of government infrastructure projects
Health care, social assistance, public service, education	Public sector	Private sector, professional services	Productivity improvements can be used for cost-cutting or increasing public service delivery; Low-wage jobs at lower risk but and strong underlying growth should moderate job losses/retraining.
Transport	Air transport	Professional services, hospitality	Different retraining opportunities for pilots, airport staff, flight attendants
Agriculture	Farm management	Professional services	Accelerate long term trend; Other issues may be alleviated e.g. fruit picking; Expand into exports, high value production

Conclusions

- Productivity
 - Creates and destroys jobs
 - Increases output and real wages
- Transition to higher productivity needs to be sensitive to risk of large job losses
 - Long term employability: Bank tellers or car manufacturers?
 - ✓YES : Bank tellers – geographically dispersed, adaptable skills for retraining
 - ✗NO : SA car manufacturers – geographically concentrated, few similar opportunities, concentrated loss of value of local dwellings. Policy intervention required.
- Lasting COVID-19 productivity improvements depend on:
 - Communication infrastructure
 - Cultural change
- Government spending and investment to adapt
 - Considerations – transport infrastructure, communication infrastructure, local amenity
 - Improvement in service delivery in health care, social assistance, education



The increasing institutional barriers to reform

**Queensland Productivity Commission conference
Productivity reform in Australia and New Zealand:
barriers and opportunities**

**John Daley, Senior Fellow, Grattan Institute
24 November 2020**

Is Australia getting worse at reform?

What were the enablers and blockers of reform over the last decade?

What institutional changes might explain a falling strike rate?

There hasn't been much reform for the last 15 years

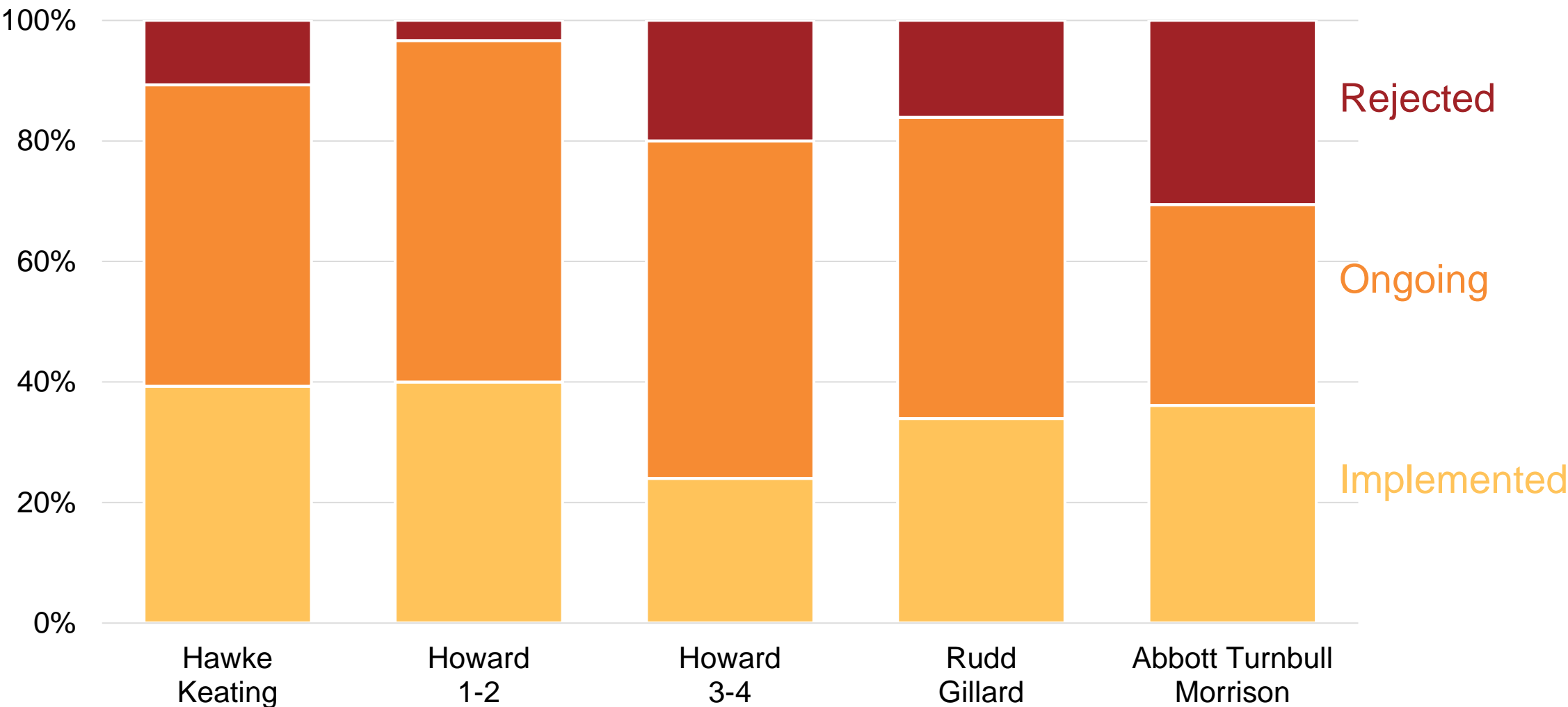
Major policy changes by policy area and government

	Hawke/Keating 1983–1996	Howard 1996–2007	Rudd/Gillard 2008–2013	AT/M 2013–2019
Trade and currency	Float A\$ International students Tariff reductions			FTAs End auto assistance
Macro/budget policy	RBA inflation targets	Balanced budget commitment	PBO	
Labour markets	Accord Enterprise Bargaining	Workplace Relations Act Skilled migration Work Choices	Fair Work Age pension access 67	Age pension access 70
Competition policy	Hilmer review	National Competition Policy	Demand-driven higher ed	
Privatisation	GBE reform CBA sale Elec Water Airline IPO	Telstra sale (1,2 & 3)		Medibank sale
Regulation	Foreign bank entry Telco dereg.	Bank capital reform	National Reform Agenda	
Tax	CGT & FBT Dividend imputation Super-annuation	GST Personal income tax cuts Company tax cut	Carbon pricing	Super tax Company tax
Federalism	Medicare	Federal/state financial reform	Federal/state health reform	NDIS School funding

Notes: Reforms that were not passed, or that were subsequently substantially wound back or repealed, are shown shaded out. 'Airline IPO' is the sale and IPO of Qantas in 1993 and 1995. Sources: Access Economics (2019) and The Economist (2011); Grattan analysis

Governments appear less guided by expert opinion

Fate of OECD policy recommendations, by government



Institutional barriers to reform

Is Australia getting worse at reform?

What were the enablers and blockers of reform over the last decade?

What institutional changes might explain a falling strike rate?

Methodology

The problems of investigating institutional reform

- Tendency to jump onto favourite institutional hobbyhorse
- Cherry-pick examples that illustrate institutional hobbyhorse
- Invite response that change failed because not worthwhile reform

Our approach

- Review all major actionable recommendations in all Grattan reports 2009-2019
- Diagnose whether implemented, investigate the enablers and blockers
- Compile all 60+ reforms, and look for patterns

Methodological advantages

- A representative sample of reforms: large number, broad portfolio range
- Selected in advance of any consideration about institutional implications
- Already have extensively argued case about why each is a worthwhile reform
- Based on an articulated set of values (spelt out in *Prioritising a government's agenda*)

What reforms happened?

Economic growth	<ul style="list-style-type: none"> • Ride-sharing 	“Easy” reforms <ul style="list-style-type: none"> • Publicly supported • Strong evidence • Not big budget cost • No party shibboleths
Taxation & welfare	<ul style="list-style-type: none"> • Superannuation taxes 	
Housing	<ul style="list-style-type: none"> • Residential tenancy policy 	
Cities & transport	<ul style="list-style-type: none"> • City transport access • Transport project value capture (avoid) 	
Energy	<ul style="list-style-type: none"> • Early stage low emission technology support 	Vigorous opposing lobby groups not a strike-out
	<ul style="list-style-type: none"> • Regulated rate of return for energy networks 	
	<ul style="list-style-type: none"> • Defaults for retail electricity pricing 	
Health	<ul style="list-style-type: none"> • Reduced pricing for generic pharmaceuticals 	
	<ul style="list-style-type: none"> • Public hospital pricing 	
	<ul style="list-style-type: none"> • Role expansion for allied health professionals 	
School education	<ul style="list-style-type: none"> • Better end of life care 	
	<ul style="list-style-type: none"> • School funding 	
	<ul style="list-style-type: none"> • School education outcome measurement • Targeted teaching approach in schools 	

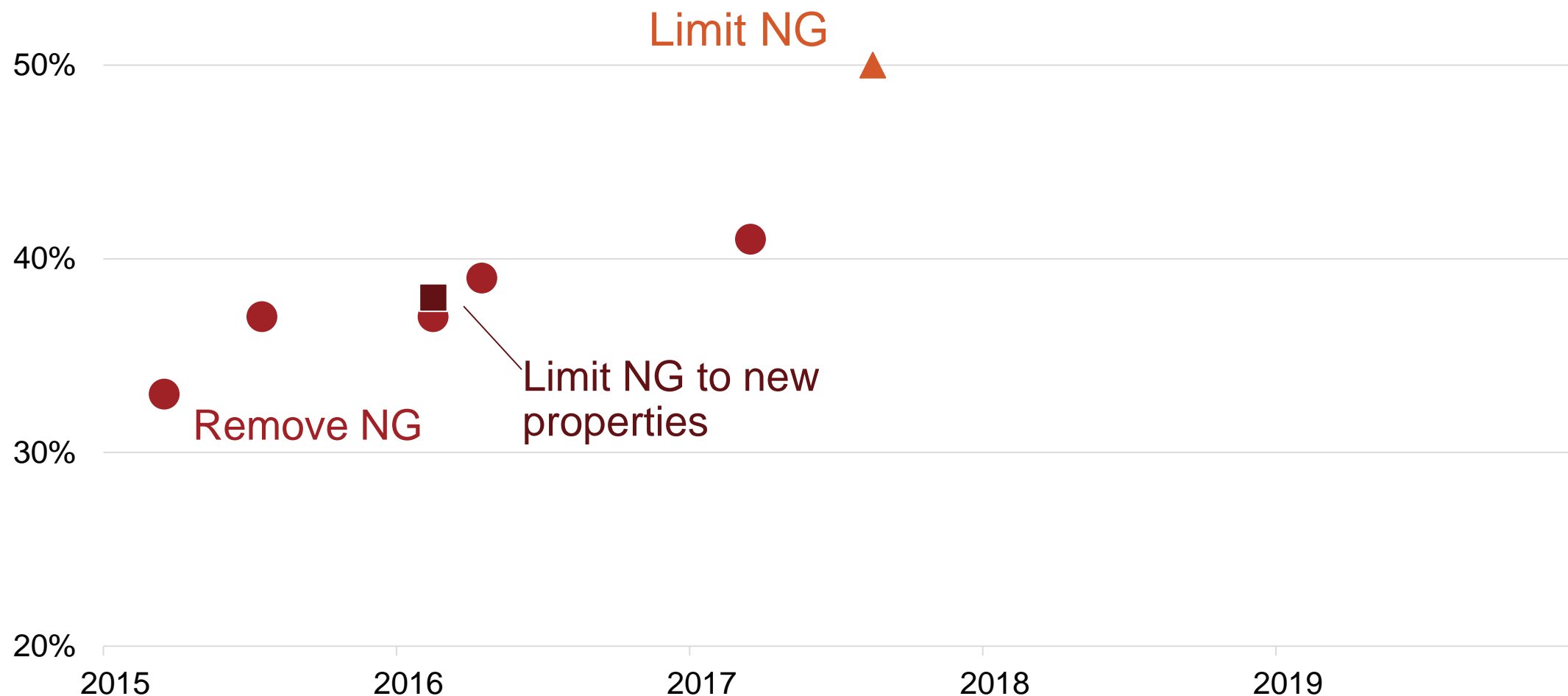
Adverse public opinion

	Adverse opinion the <u>only</u> barrier	Adverse opinion a big issue
Economic growth	<ul style="list-style-type: none"> • Regional development incentives (avoid) 	
Taxation & welfare	<ul style="list-style-type: none"> • Age-based tax breaks • Property taxes • Age Pension assets test 	<ul style="list-style-type: none"> • GST • Age Pension age • Super guarantee • Housing density
Housing	<ul style="list-style-type: none"> • Home buying incentives (avoid) 	
Cities & transport	<ul style="list-style-type: none"> • Transport project selection • Congestion pricing 	
Not the big barrier in energy, health, and school education		<p>Cf “golden era” of reform: tariff reductions and privatisation were unpopular then – and now</p>



Negative gearing reform is popular, and increasingly so with debate

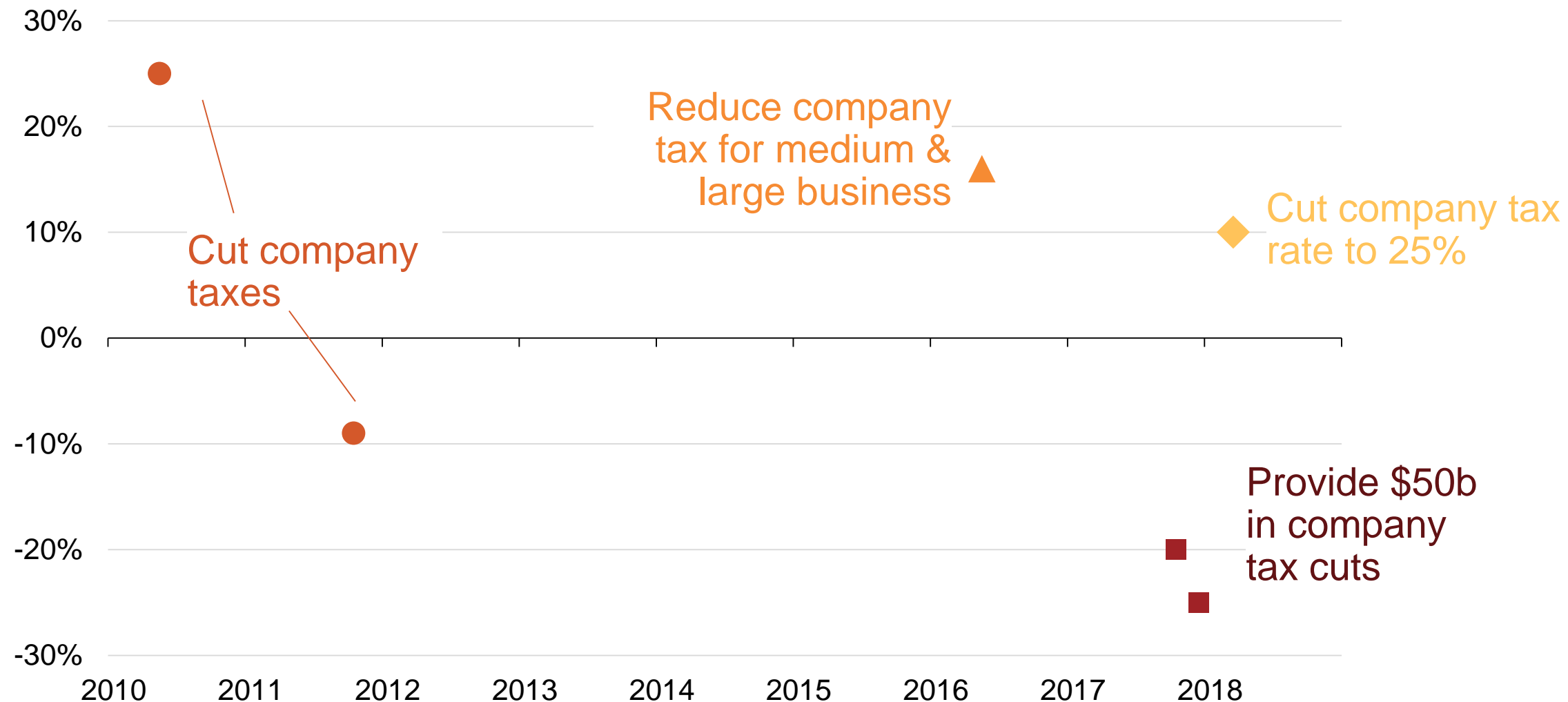
Net support for reform to negative gearing, percentage of survey respondents





Popular attitude to company tax cuts is equivocal, and depends on framing

Net support for company tax changes, percentage of survey respondents



Contrary or absence evidence base

Taxation & welfare

- Carbon pricing exemptions
- Age pension age
- Company tax

Doesn't count Grattan (so maybe we were wrong)

Better evidence can influence public opinion

Energy

- Excessive electricity reliability
- Escrow fund for electricity costs
- Wholesale electricity market gaming
- Time-sensitive domestic electricity tariff

Better evidence often counters lobby groups

A lot of important issues where the evidence base is poor (e.g. Age Pension age)

Health

- Pathology pricing
- Chronic disease management
- Dental care
- Disease hotspot intervention
- Private health prices & charges

Economic growth	<ul style="list-style-type: none">• Labour hire platforms
Taxation & welfare	<ul style="list-style-type: none">• Income tax (Stage 3)• Investment taxes• Platform user taxation• Private Health insurance
Retirement incomes	<ul style="list-style-type: none">• Super costs• Super Guarantee
Energy	<ul style="list-style-type: none">• Carbon pricing
Health	<ul style="list-style-type: none">• Pathology pricing• Sugary drinks taxes

Shibboleths (see Judges Ch 12)

- Industrial relations
- “Tax must be no more than 23.9% of GDP”
- “GST is regressive”
- “More superannuation is better”
- Carbon pricing is evil (but grants for renewables are OK)
- Personal choice in health/education is paramount

Events

School funding
(legislated nominal increase)

Superannuation taxes
(ran out of options)

Dogs that don't bark

Upper house obstructionism

Federalism

Budgetary costs

Institutional barriers to reform

Is Australia getting worse at reform?

What were the enablers and blockers of reform over the last decade?

What institutional changes might explain a falling strike rate?

Institutional issues

Stylised facts

- Increasing tendency to repeal reforms
- Ideological positions not being overcome by rational argument
- No longer doing reforms when they are unpopular
- Lobby groups often don't prevail when the evidence base is strong

Possible explanations

- Professionalisation of politics: shrinking party membership, increasing power of party machine, career path via ministerial advisors, post-politics 'jobs for the boys' (personal cost of failure is higher)
- Growth of ministerial offices (inherently risk-averse)
- Fewer semi-independent bodies, weaker public service, more consultants
- Media (24 hour, social, less expert)

Possible remedies

- Political funding reforms
- Accountability (and size?) of ministerial offices
- Restore appointment norms
- ICAC
- More independent bodies with the right to publish

From Star to Superstar: Income growth in New Zealand

Presentation to Productivity Commissions Forum
24 November 2020

Arthur Grimes

Motu Economic & Public Policy Research, &
Victoria University of Wellington

Shine Wu (Motu Economic & Public Policy Research, & Duke University)

Outline

Income growth = f (Allocative efficiency, Productivity)

- productivity growth neither necessary nor sufficient for income growth
- but helpful!

Illustrative examples:

- and is capital shallowness a problem or a benefit?

Historical paths:

- hasn't Australasia done well!
- (though NZ was a basket-case before 1991)

What now: moving from star to superstar?

Is productivity growth the goal?

Two countries (1, 2) and two industries (A, B)

Industry A has productivity growth rate = 1% p.a.

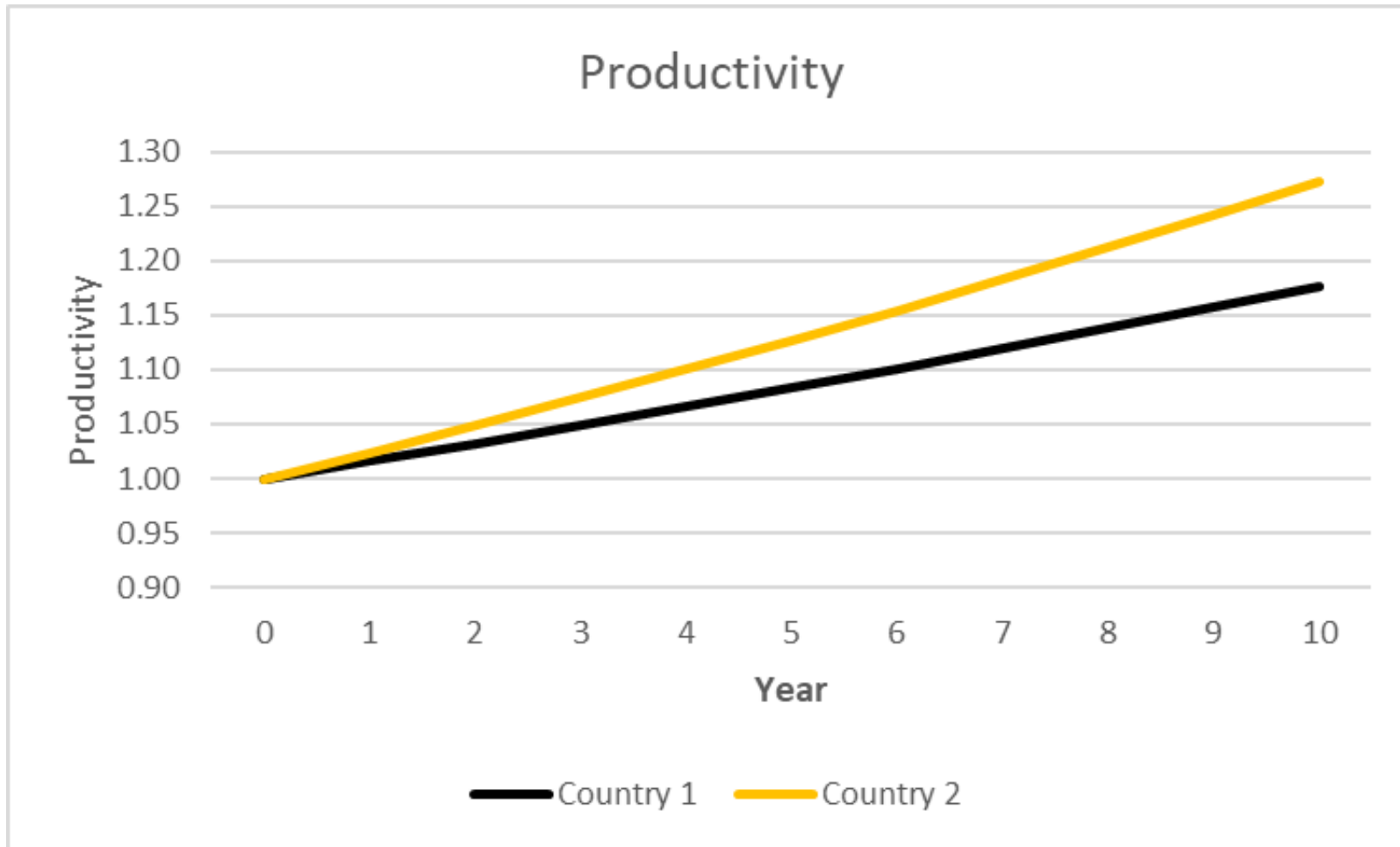
Industry B has productivity growth rate = 3% p.a.

Country 1 has 70% labour in industry A; 30% in industry B

Country 2 has 30% labour in industry A; 70% in industry B

Country 2 prospers, right?

Productivity trends



Income growth

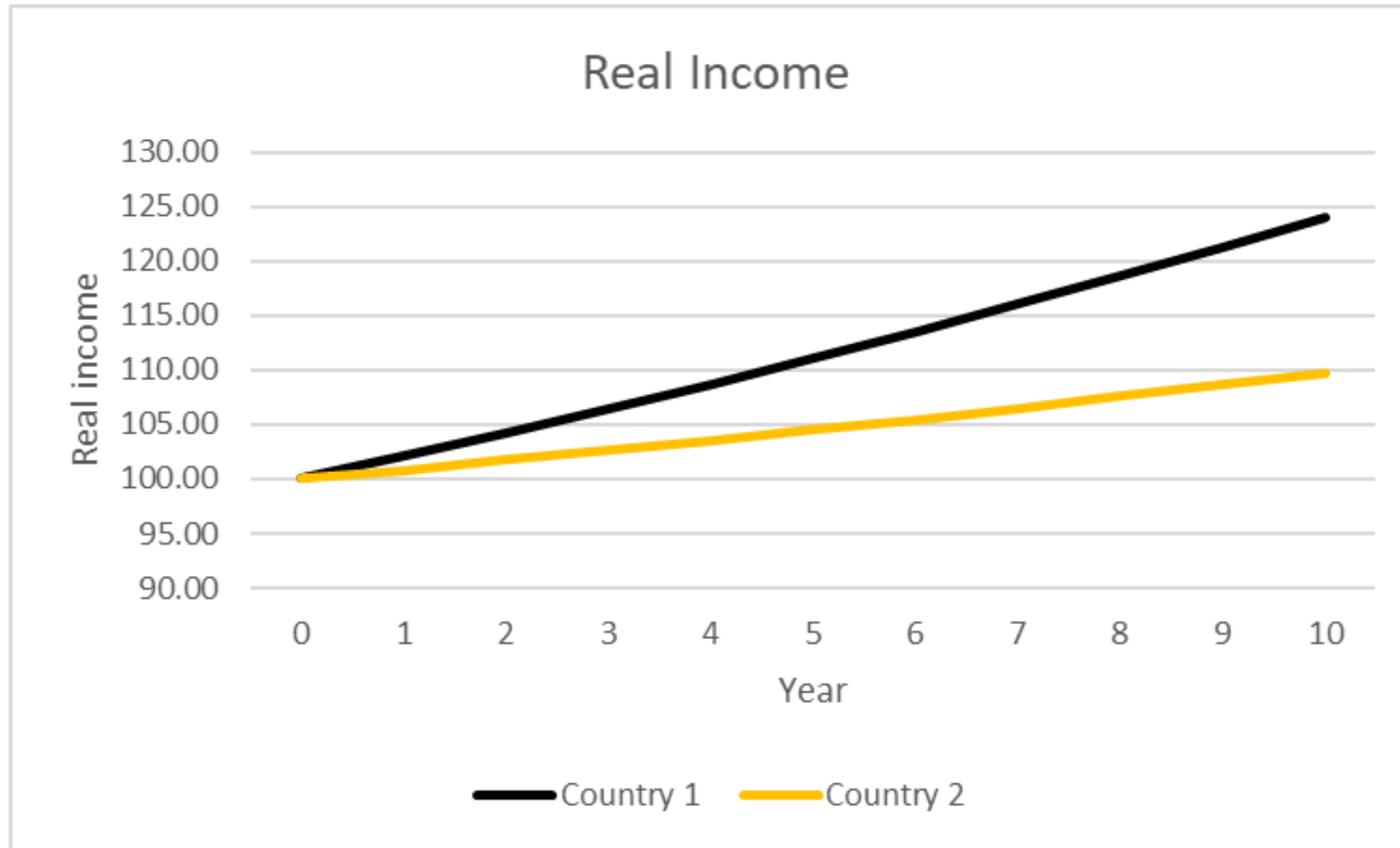
Same countries, same industries, same productivity trends
& same labour allocations

Industry A has real price growth rate = 2% p.a.

Industry B has real growth rate = -3% p.a.

Which country prospers?

Real income trends



Industry allocation matters!

The aim is to be in industries with increasing income

- of course productivity growth helps
- but allocative efficiency also matters
- it pays to be in industries with rising international prices

Capital shallowness (illustration)

Do you prefer to be in **country 3** with production function:

$$Y = K^{0.5}L^{0.5}$$

or **country 4** with production function:

$$Y = (F+K)^{0.5}L^{0.5}$$

where Y = gross output

K = capital stock (which depreciates at 10% p.a.)

F = farmland (no depreciation)

L = labour

Capital shallowness

- country 4 is capital shallow, and better off!

	Country 3	Country 4
L	100	100
K	400	100
F	0	224
F+K	400	324
<i>Gross Y</i>	<i>200</i>	<i>180</i>
Depr	40	10
Net Y	160	170

Lessons

Look at income (or consumption*), not production

- cf Stiglitz, Sen, Fitoussi report

Look at net income, not gross

Hence, for national accounts, look at NNI not GDP

Also adjust NNI for resource depletion → ANNI (World Bk)

* Grimes A, Hyland S. 2020. *Scottish Journal of Political Economy*, 67, 248–271.

Carver T, Grimes A. 2019. *Review of Income and Wealth*, 65(S1), S256-S280.

Material living standards

ANNI measures income available to be consumed after setting aside depreciation and resource depletion

World Bank measures ANNI in current USD

Convert to domestic currency by market exchange rate

Deflate by domestic CPI

Divide by population

→ Real ANNI per capita

Data

All data from World Bank World Development Indicators

Available from 1970 - 2018

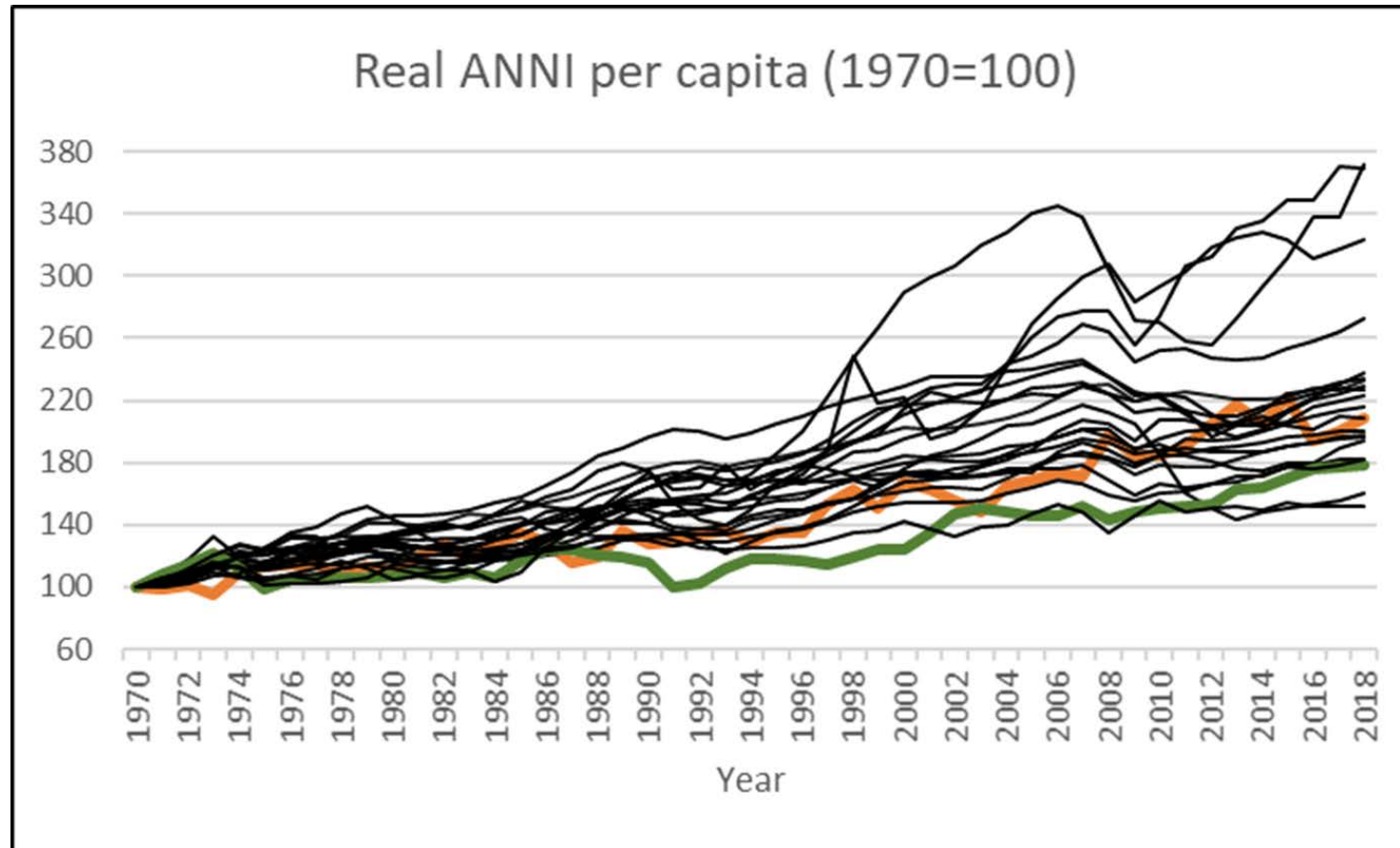
Use all 'early OECD' 24 countries excl Iceland & Luxembourg (data issues and very small); all developed except Turkey

Full sample and split samples at 1994

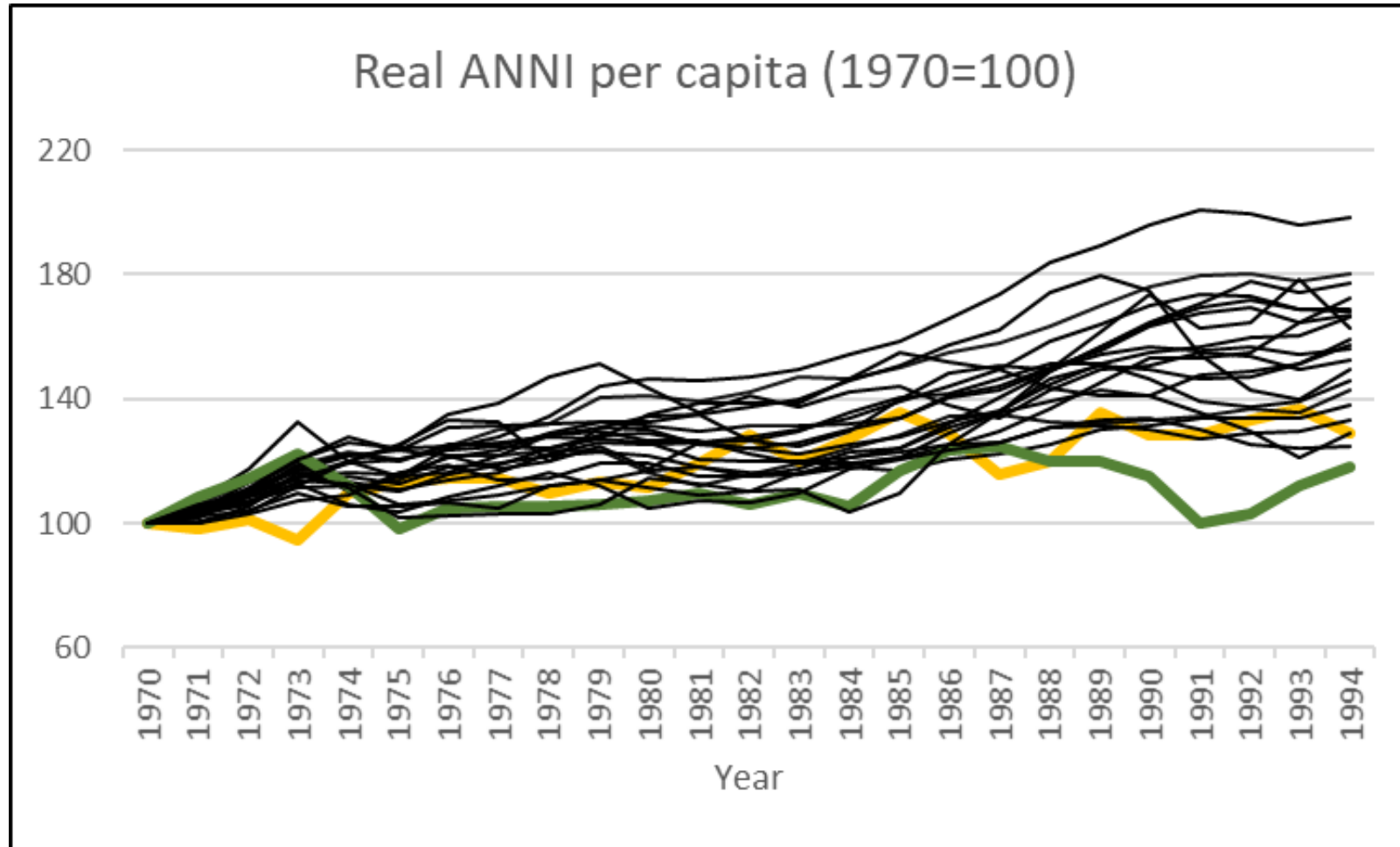
- half-way point
- after main economic reforms in NZ & Australia

NZ (green) & Australia (gold) highlighted

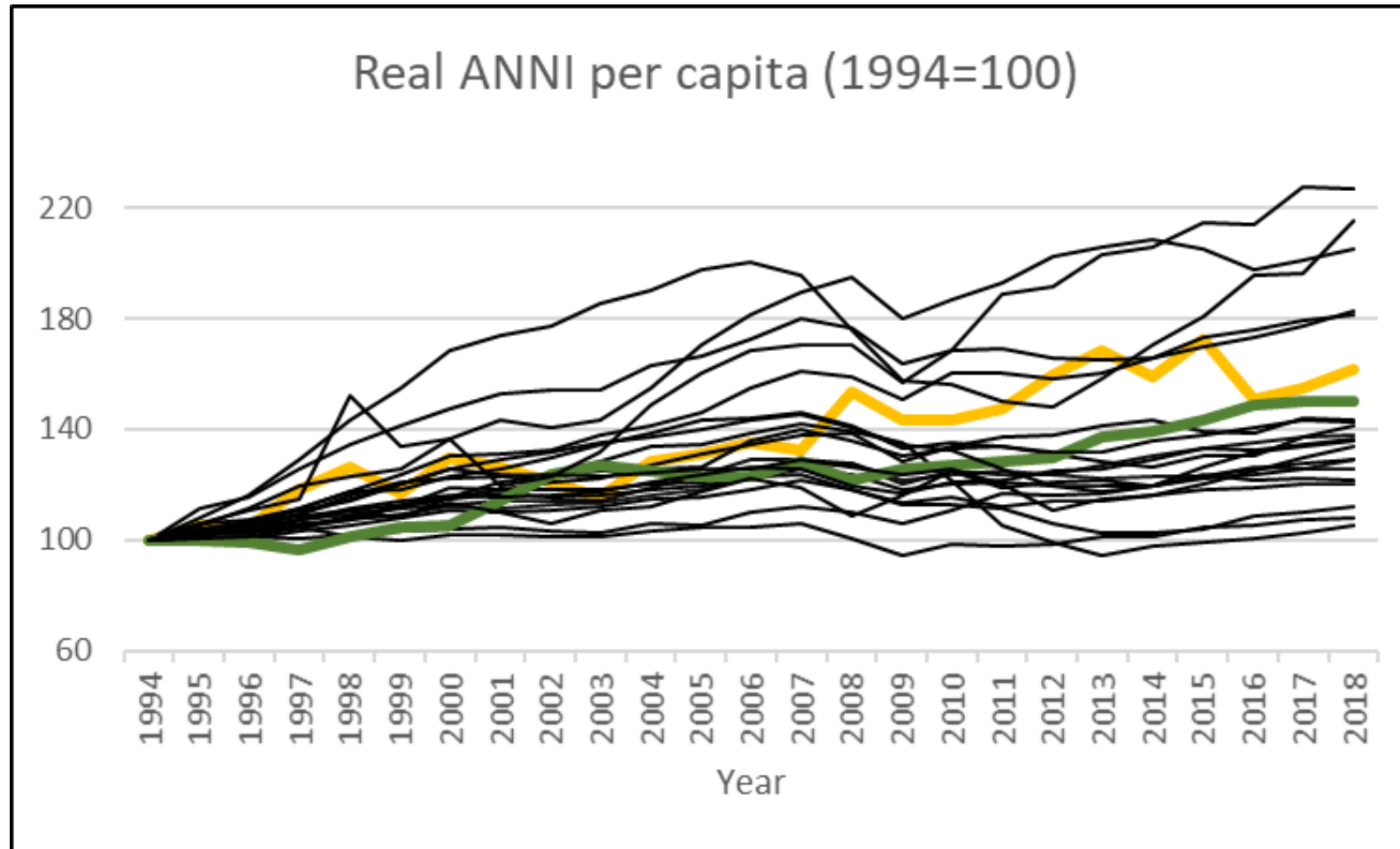
Full period: NZ poor; Australia an also-ran



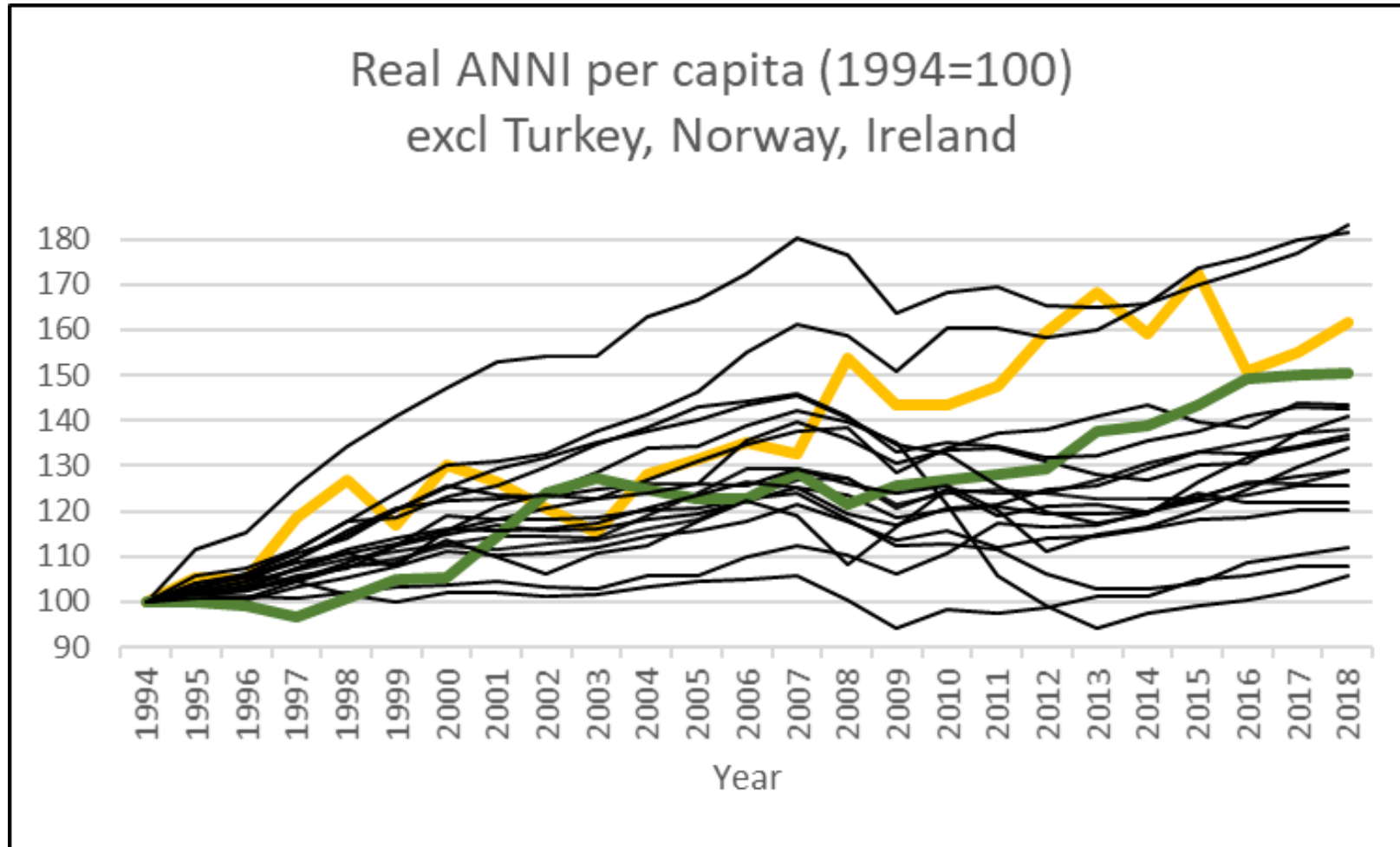
First half: NZ a disaster; Australia close to it



Second half: Both in top third ('star' not superstar)



Second half: Excl 3 superstars



Why has NZ's income per head grown so fast over >24 years?

Sound macro fundamentals: monetary & fiscal discipline

+

Low level of interference by govt in markets

=

Private sector in charge of resource allocation

Labour force increase is an example of good allocation

- extra employment is **positive** for wellbeing
- **i.e. this should not be seen as an offset !!**

Can NZ keep up its strong record of increases in incomes per head?

Resource allocation has been the key for past 24 years

- but agricultural gains *may* now be plateauing

NZ has poor record on fundamental & applied research
(e.g. cf Israel, Singapore, Denmark)

Public sector support for R&D is very poorly structured and much is wasted (e.g. National Science Challenges, COREs)

- because of lack of attention to scale

Possible avenues (Koi Tu paper)

<https://informedfutures.org/nzs-economic-future/>

Reallocate public research funding to create research centres of scale – within universities

Ensure Auckland's (moderate) size is leveraged
- but also leverage other cities' strengths

Reform tax & other policies leading to high-priced houses (discourages overseas talent) and → resource misallocation

Drop industry policies propping up old industries (e.g. timber)

Address skills deficiencies (esp. at lower end of spectrum)

Key points

Allocative efficiency and productivity growth both important for income growth

Concentrate on income or consumption, not production

NZ (& Australia) both star performers for income per head since early 1990s

Need to keep options open for future allocative gains via better R&D and skills, & removing tax distortions

Poor diagnosis leads to poor policies

- Risk of advocating policies that “solve” non-existent problem

End of period index numbers

	AUS	AUT	BEL	CAN	DEN	FIN	FRA	GER	GRE	IRE	ITA
1970-2018	208	233	200	209	198	273	196	215	161	372	223
1970-1994	129	180	166	146	143	149	156	167	152	172	199
1994-2018	162	129	120	143	138	183	126	129	106	216	112
	JAP	NETH	NZ	NOR	PORT	SP	SWE	SWI	TUR	UK	US
1970-2018	182	194	178	323	238	229	234	152	369	227	182
1970-1994	169	138	118	157	177	168	129	125	163	159	133
1994-2018	108	141	150	205	134	136	182	122	227	143	137

Annual percentage growth rates

	AUS	AUT	BEL	CAN	DEN	FIN	FRA	GER	GRE	IRE	ITA
1970-2018	1.5	1.8	1.5	1.5	1.4	2.1	1.4	1.6	1.0	2.8	1.7
1970-1994	1.1	2.5	2.1	1.6	1.5	1.7	1.9	2.2	1.8	2.3	2.9
1994-2018	2.0	1.1	0.8	1.5	1.4	2.5	1.0	1.1	0.2	3.3	0.5
	JAP	NETH	NZ	NOR	PORT	SP	SWE	SWI	TUR	UK	US
1970-2018	1.3	1.4	1.2	2.5	1.8	1.7	1.8	0.9	2.8	1.7	1.3
1970-1994	2.2	1.3	0.7	1.9	2.4	2.2	1.1	0.9	2.0	2.0	1.2
1994-2018	0.3	1.4	1.7	3.0	1.2	1.3	2.5	0.8	3.5	1.5	1.3

The Economics and Public Policy of Tertiary Education Financing: Lessons for VET

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November 2020

OUTLINE

- 1 Background: VET size and problems
- 2 Why is a charge for tertiary education justified and desirable for the system?
- 3 Why are student loans from government necessary?
- 4 What are “income-contingent loans” (ICL), how do they operate and why are they desirable?
- 5 The characteristics of an ideal tertiary education financing system
- 6 The weaknesses of public sector VET financing
- 7 How to have a universal ICL system for VET

1 Background: VET size and problems

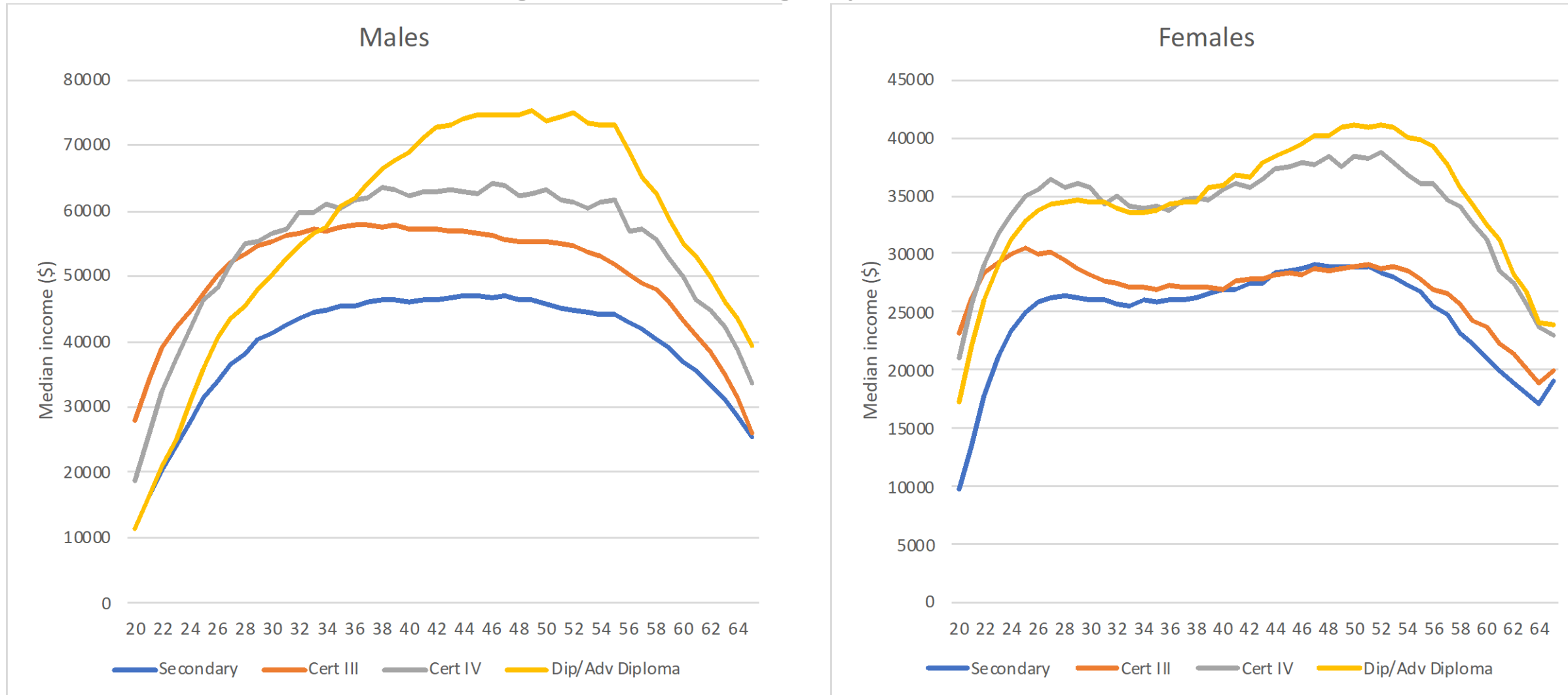
- (i) VET is huge, at least 550,000 people in accredited training courses
- (ii) The financing issues are in a mess (all reports say this, and they are right); huge fees for some, no fees for the majority;
- (iii) The topic of this talk is, why there is a problem and how to fix it
- (iv) I have to start with theory: why should there be a charge is the beginning

2 Why a charge for public tertiary education is justified and desirable for the access of the poor

- (i) Equity: private rates of return and government subsidy of VET (Figure 1);
- (ii) A charge means the cost to the government of a bigger sector are lower; and
- (iii) The best way to maximise access to the system for the poor is to have a large number of places (UK experience)

Figure 1

VET Age-earnings profiles (NSW)



3 Why are student loans needed from the government?

Banks will not help, because:

- (i) The investment is risky: non-graduation, poor jobs early, unpredictable events (Covid);
- (ii) Poor outcomes for students/graduates can lead to default of bank loans;
- (iii) With no saleable collateral banks are unprotected

There are two types of loans:

Time-Based Repayment Loans (US, Canada, Colombia, China, Japan); and

Income-Contingent Loans (Australia, New Zealand, England, Hungary)

4 What are “income-contingent loans” (ICL), how do they operate and why are they desirable?

- (i) ICL: Debts repayable iff former students earn above a given income;
- (ii) Therefore, no repayments needed if unemployed, out of the labour force, in a low-paying job;
- (iii) ICL desirable because of insurance: no repayment hardships when incomes are low, therefore no defaults (cf US etc);
- (iv) Collection is extremely efficient through employer with-holding;
- (v) HECS revenue has underwritten a trebling of university places since 1989; and
- (vi) In Australia and the UK from ICL: very large increases in graduates and enrolments of the disadvantaged.

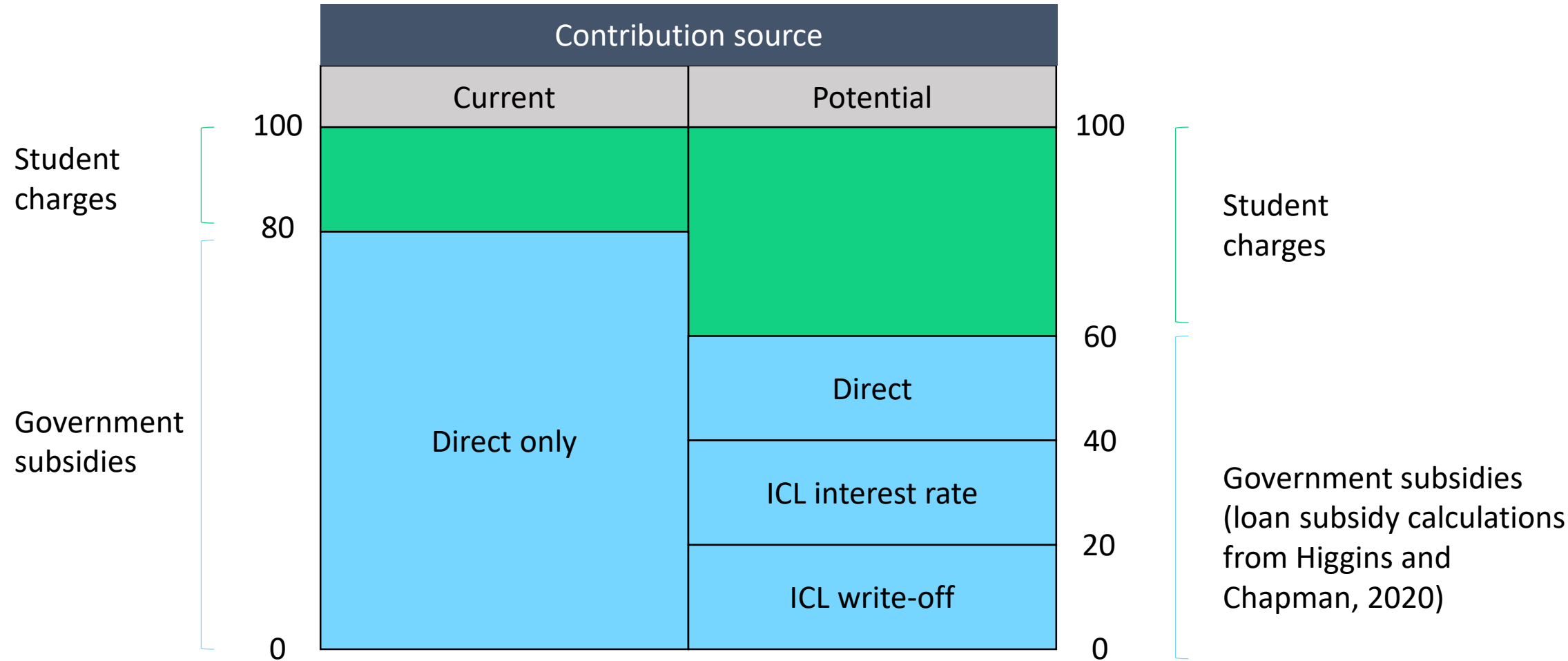
5 The characteristics of an ideal tertiary education financing system

- (i) Student charges to reflect private benefits
- (ii) Government subsidies such as to ensure high enrolments and quality, “free” means small
- (iii) Universally available ICL

6 The weaknesses of the public sector VET financing system

- (i) Charges do not reflect private benefits
- (ii) Huge subsidies limit the size and quality of the sector (70-75% average for Cert III/IV, zero/very low charges for most)
- (iii) But for the vast majority there is no access to loans, including for those paying \$10,000 in non-subsidized sector
- (iv) There is no convincing rationale for either subsidies or ICL access

7 Towards public sector VET financing reform



8 How to have a universal ICL system for VET

- (i) The Commonwealth Government (CG) is only required for ICL collection;
- (ii) Thus, all other VET policy issues stay with the States/Territories (S/T);
- (iii) CG could pay student's tuition, as is the case with HECS;
- (iv) Collection then happens for CG, no need for reconciliation;
- (v) Need for a surcharge and/or S/T contribution.

Thank you