



Seminário
internacional:
**Projeções de custo
do envelhecimento
no Brasil**

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**Projeções de custo
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Population Ageing in Australia

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(CEPAR)

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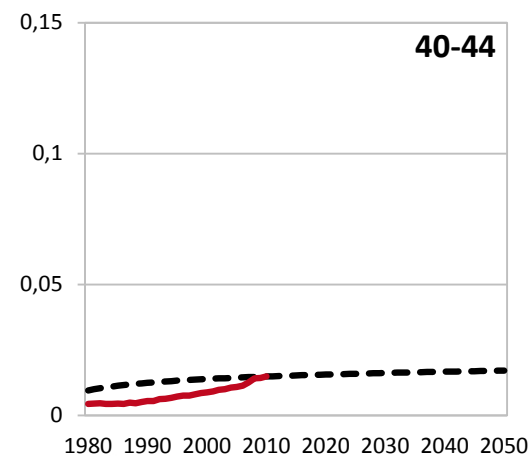
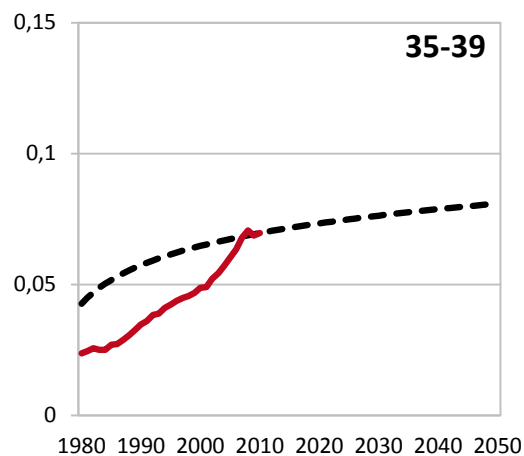
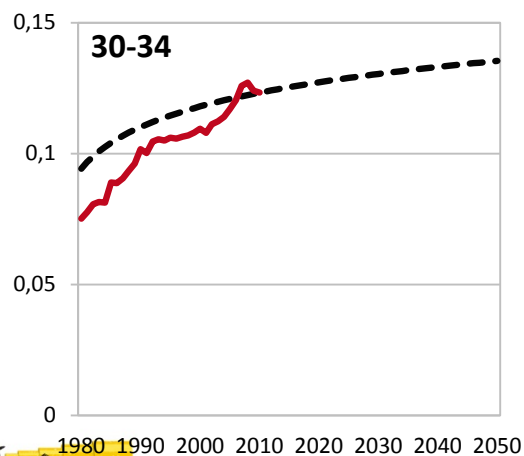
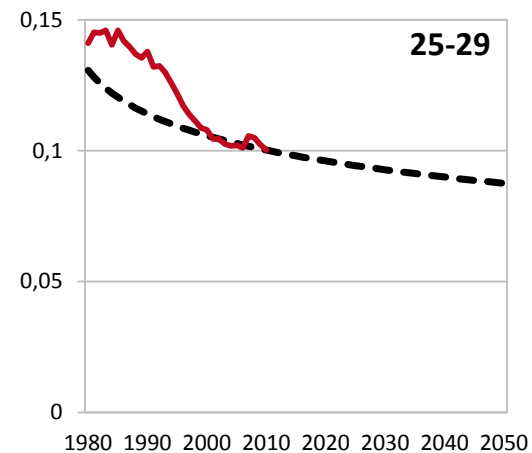
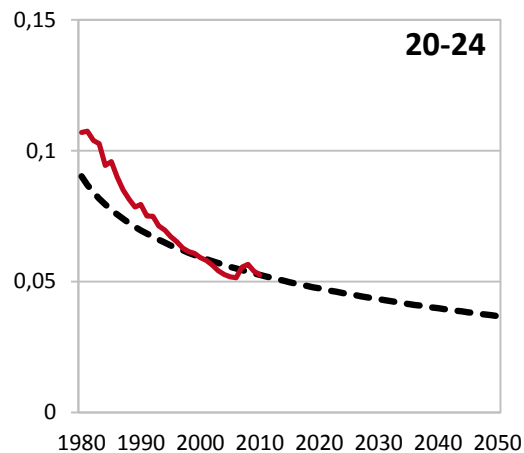
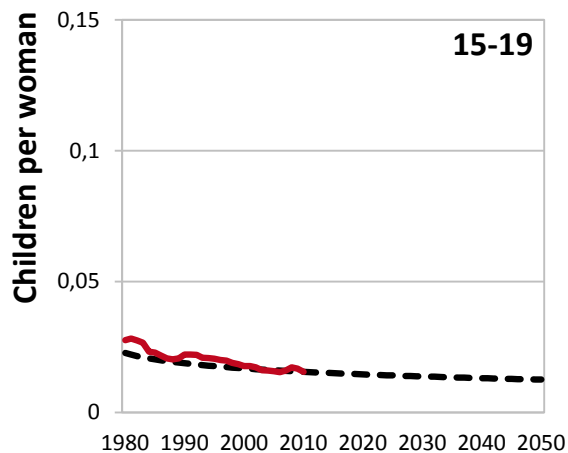
Population ageing in Australia

Demographic context	→	(1) Fertility
Economic context		(2) Longevity
Policy context		(3) Migration
Fiscal Projections		(4) Age-structure
Issues		(5) Age-dependency

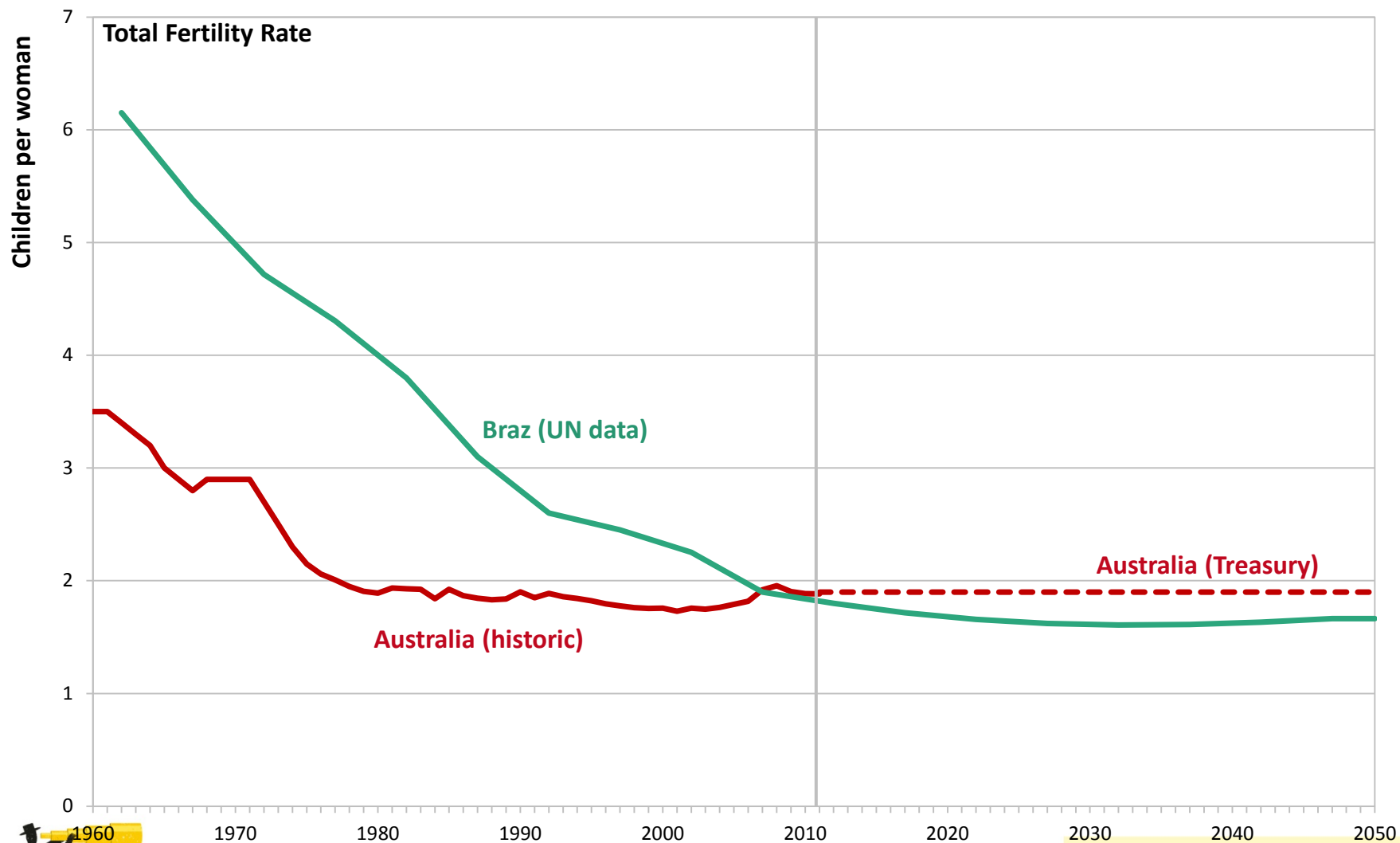


Demographic context: Fertility

Australian historic and logistic age-specific fertility

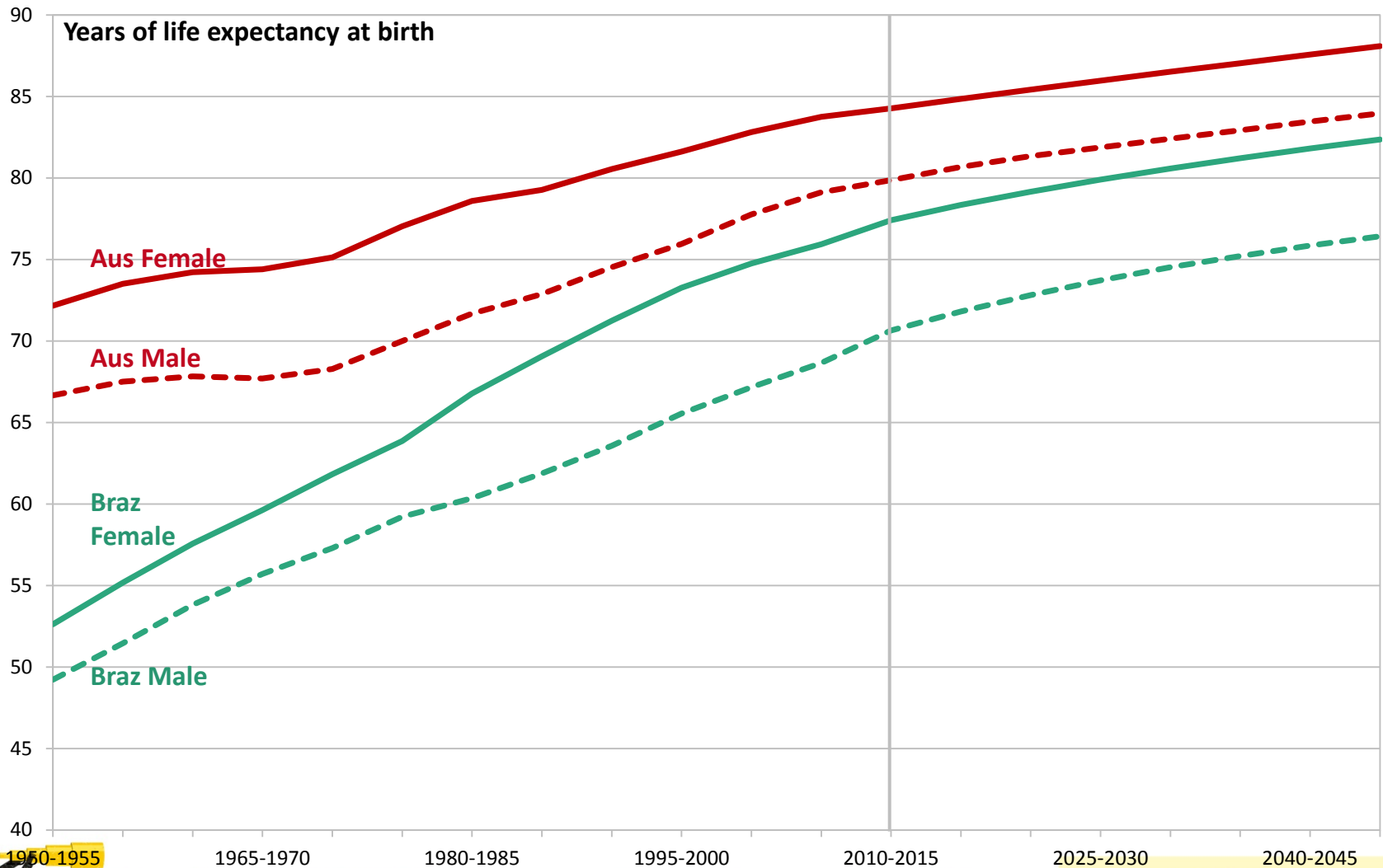


Demographic context: Fertility

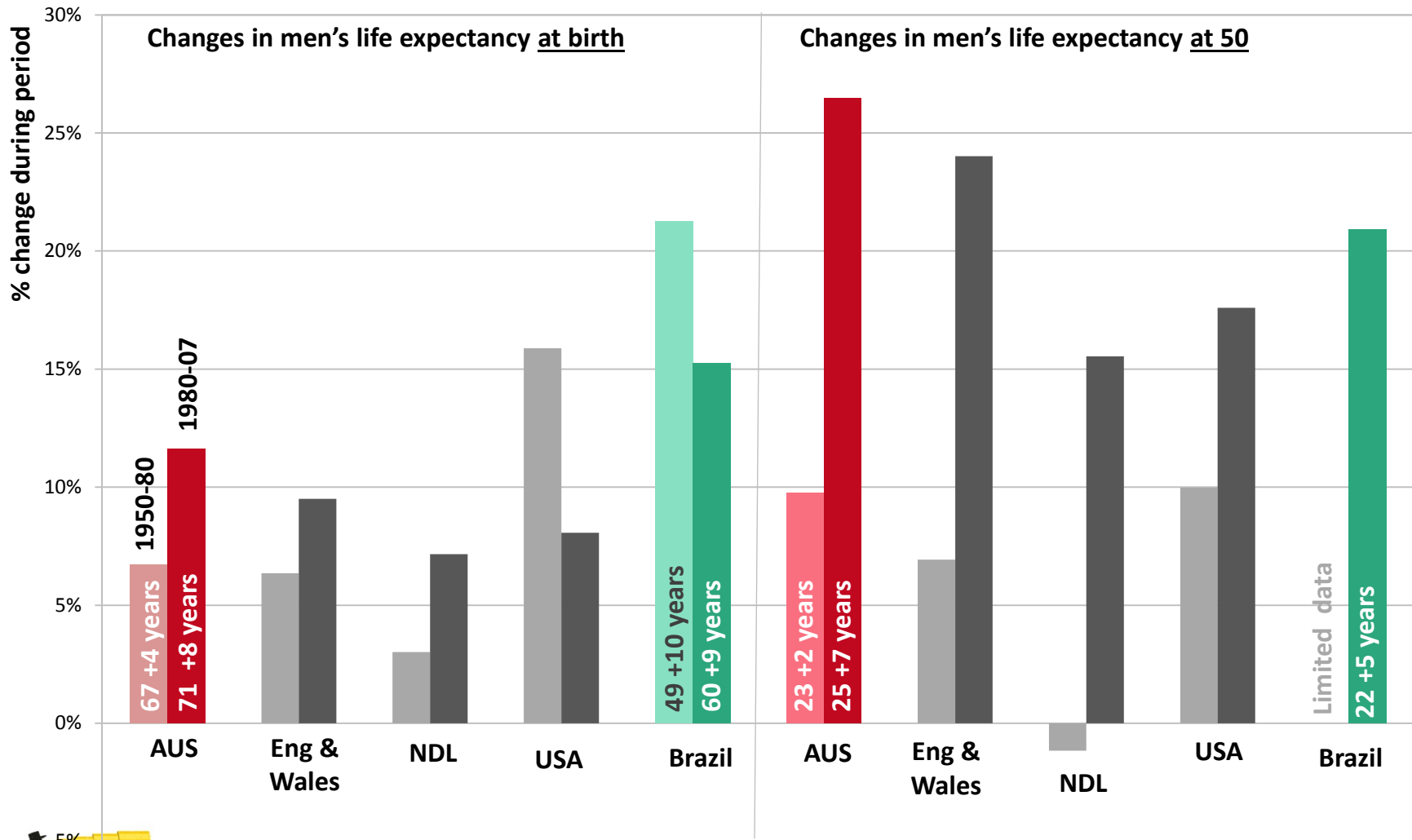


Source: ABS 3301.0 - Births, Australia, UN (2011) 'World Population Prospects: The 2010 Revision'

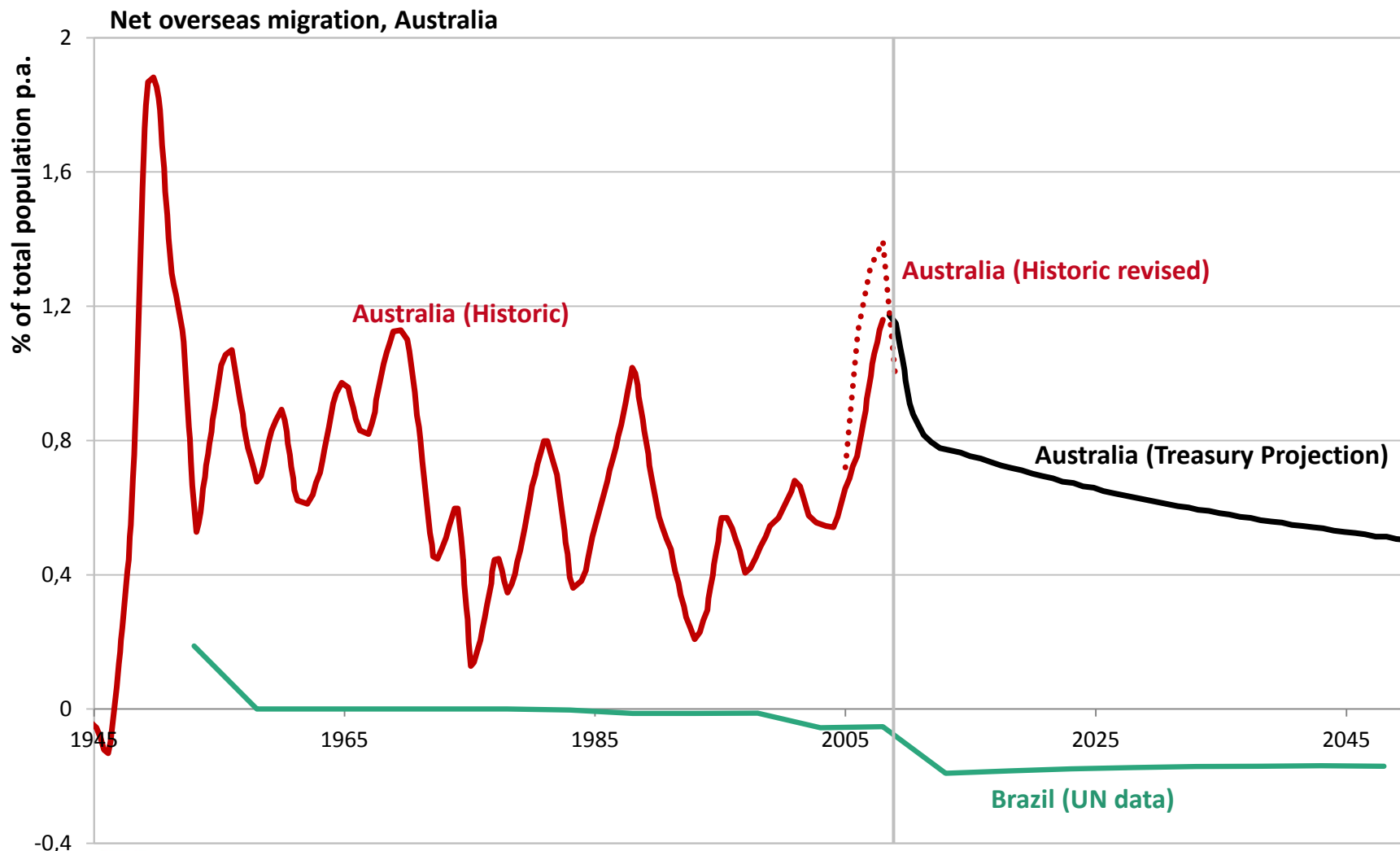
Demographic context: Longevity at birth



Demographic context: Mid life longevity

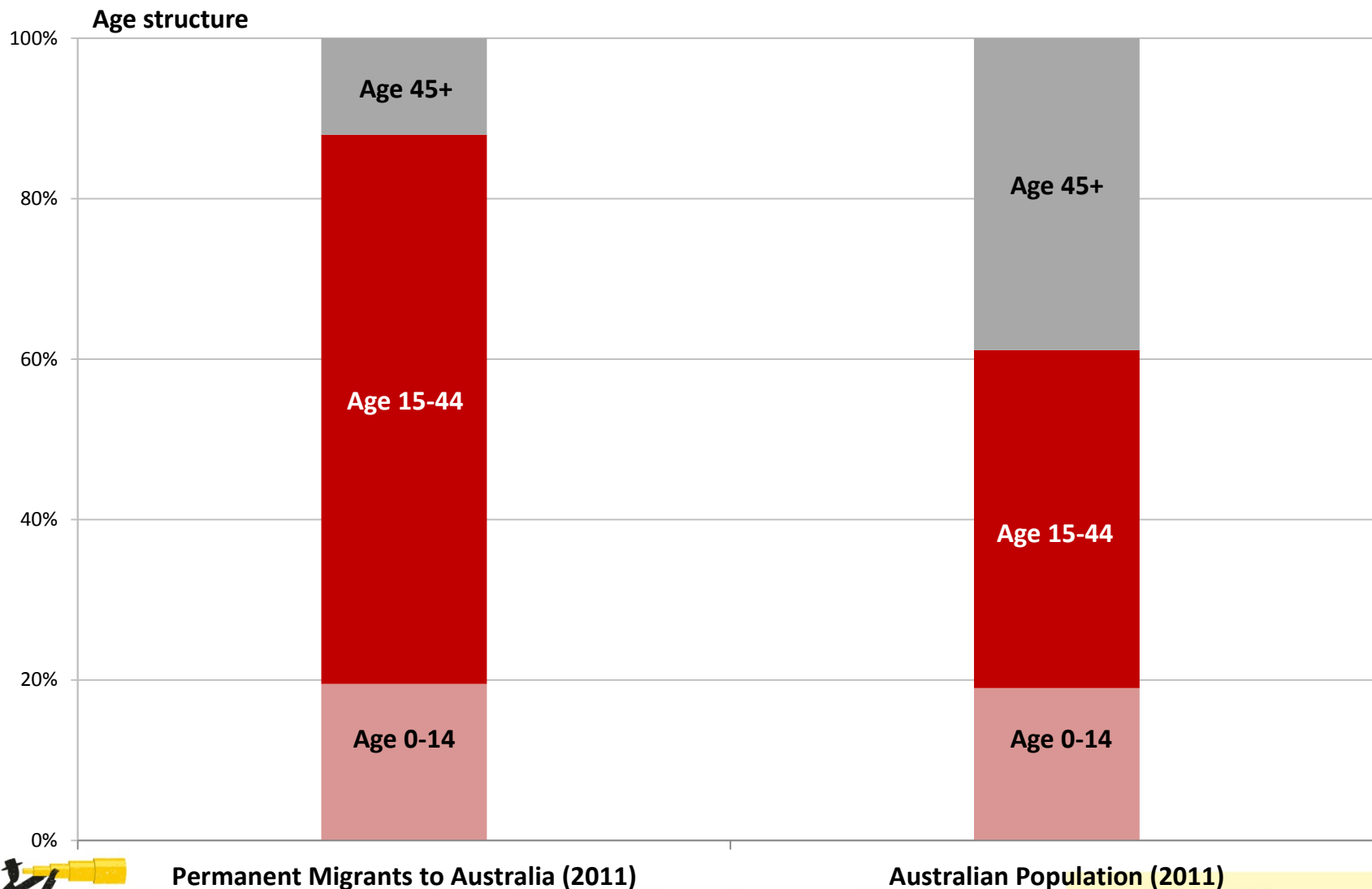


Demographic context: Migration



Source: Treasury (2010), ABS (2011) Cat 3412.0; UN (2011) 'World Population Prospects: The 2010 Revision'

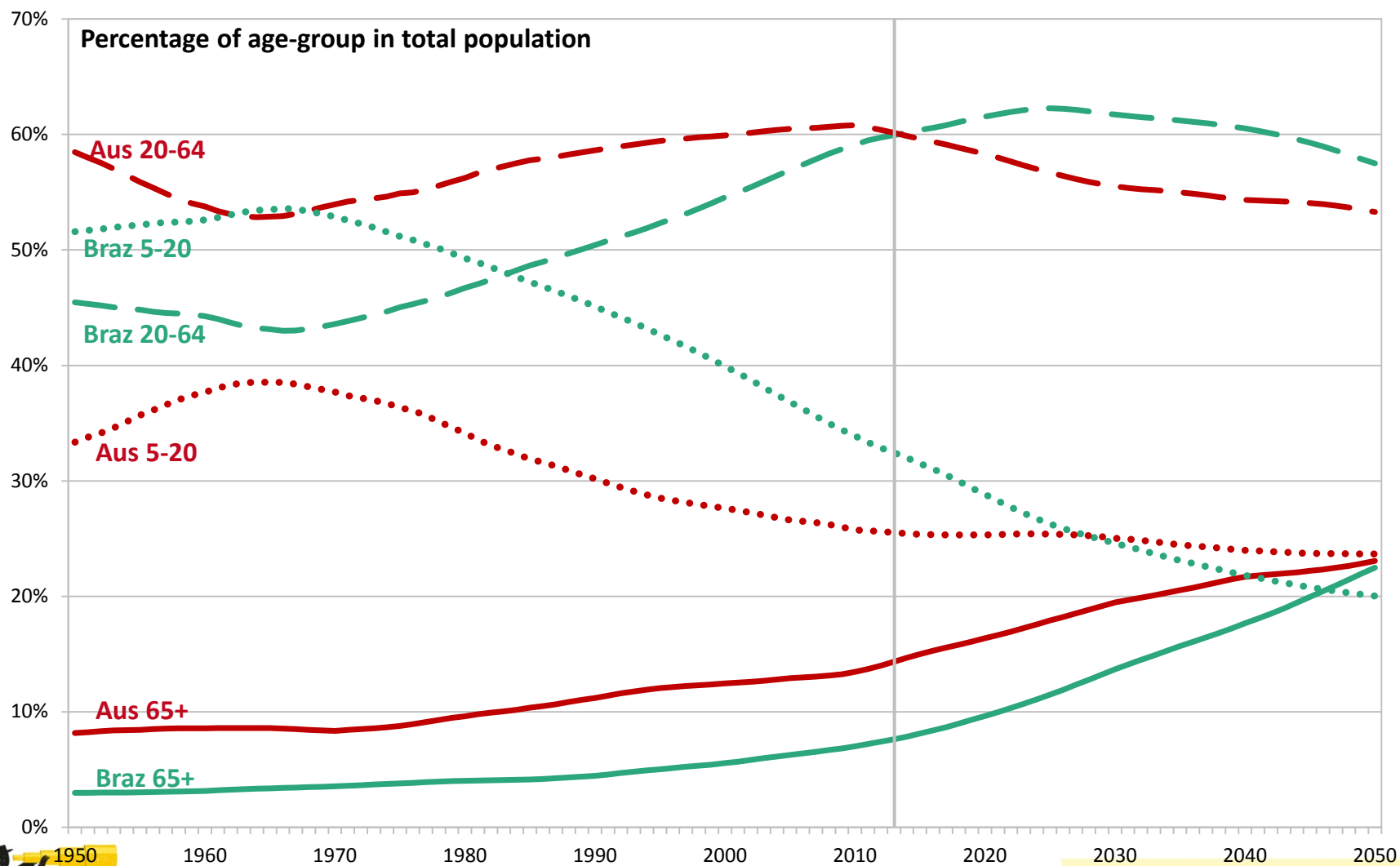
Demographic context: Migration



Permanent Migrants to Australia (2011)

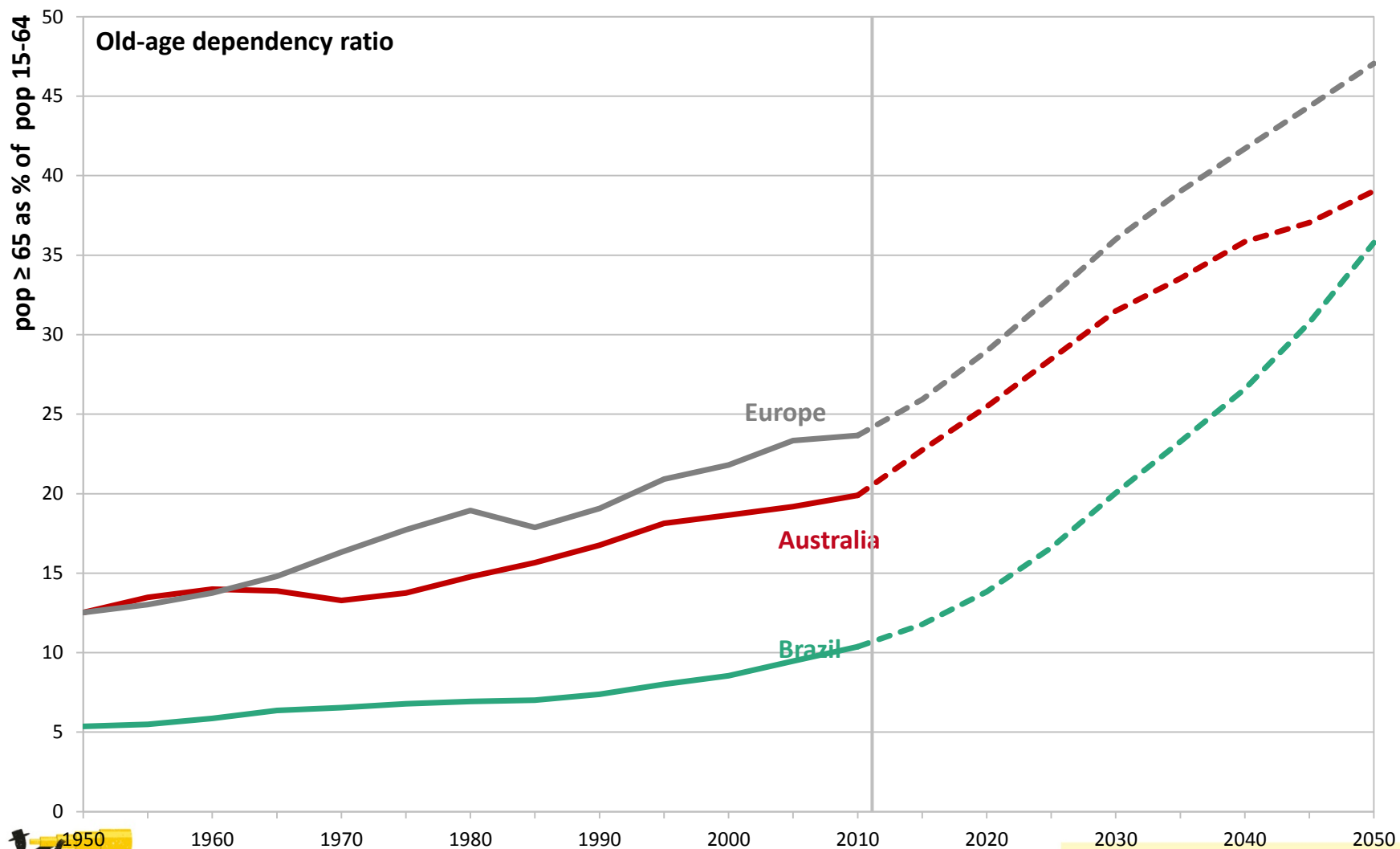
Australian Population (2011)

Demographic context: Age Structure



Source: UN (2011) 'World Population Prospects: The 2010 Revision'

Demographic context: Age Dependency



Source: UN (2011) 'World Population Prospects: The 2010 Revision'

Population ageing in Australia

Demographic context

Economic context → (1) Participation

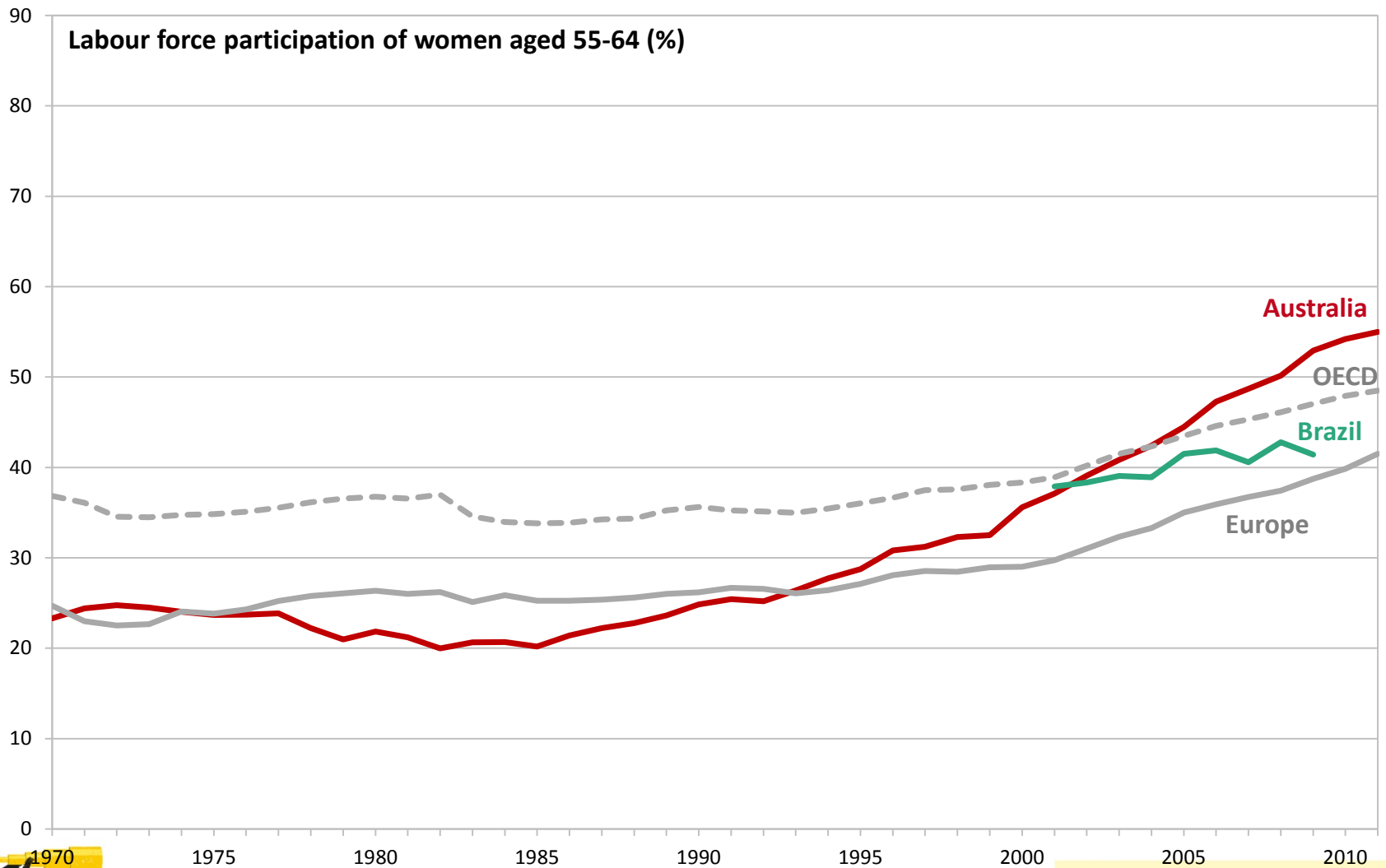
Policy context (2) Productivity

Fiscal Projections

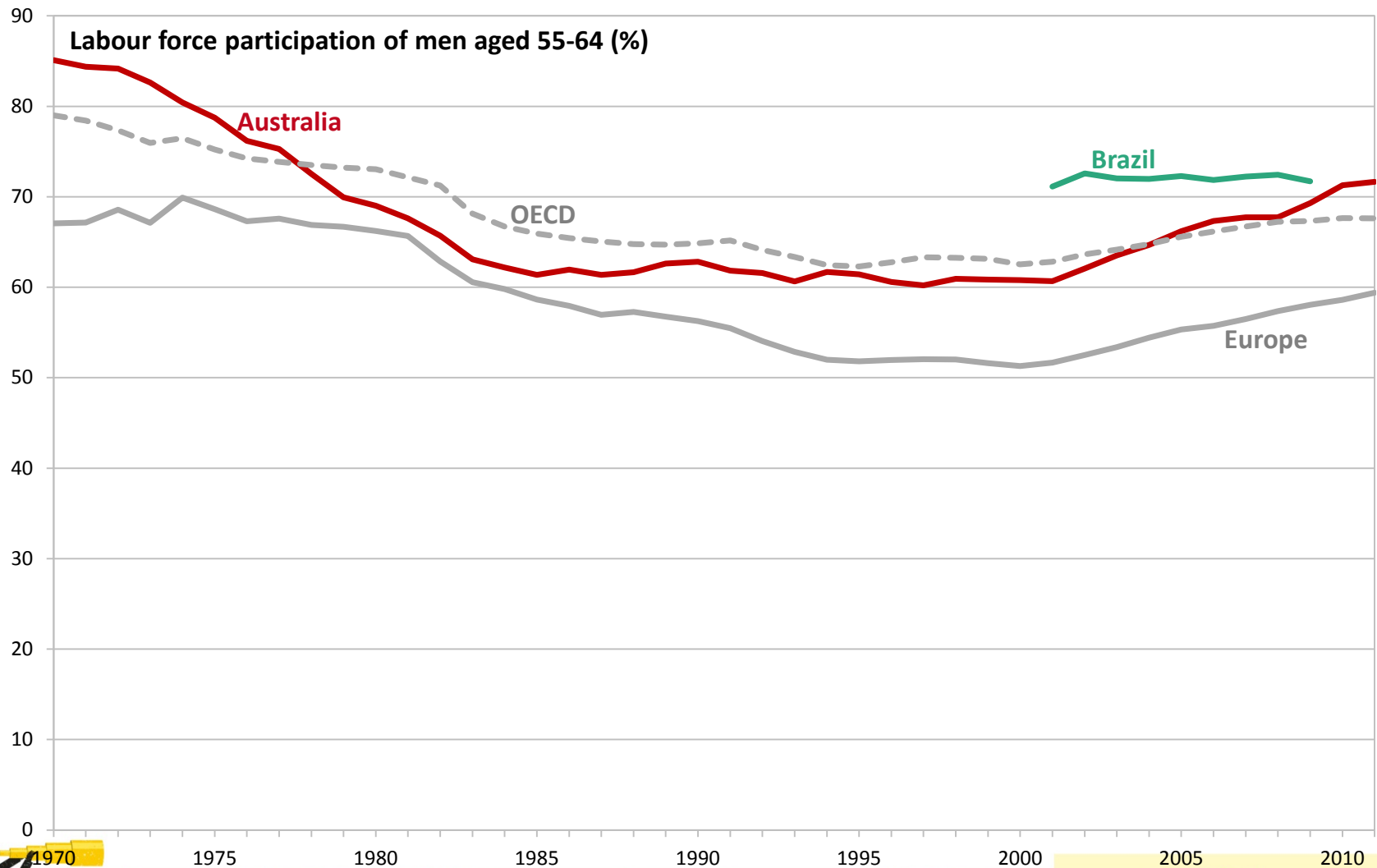
Issues



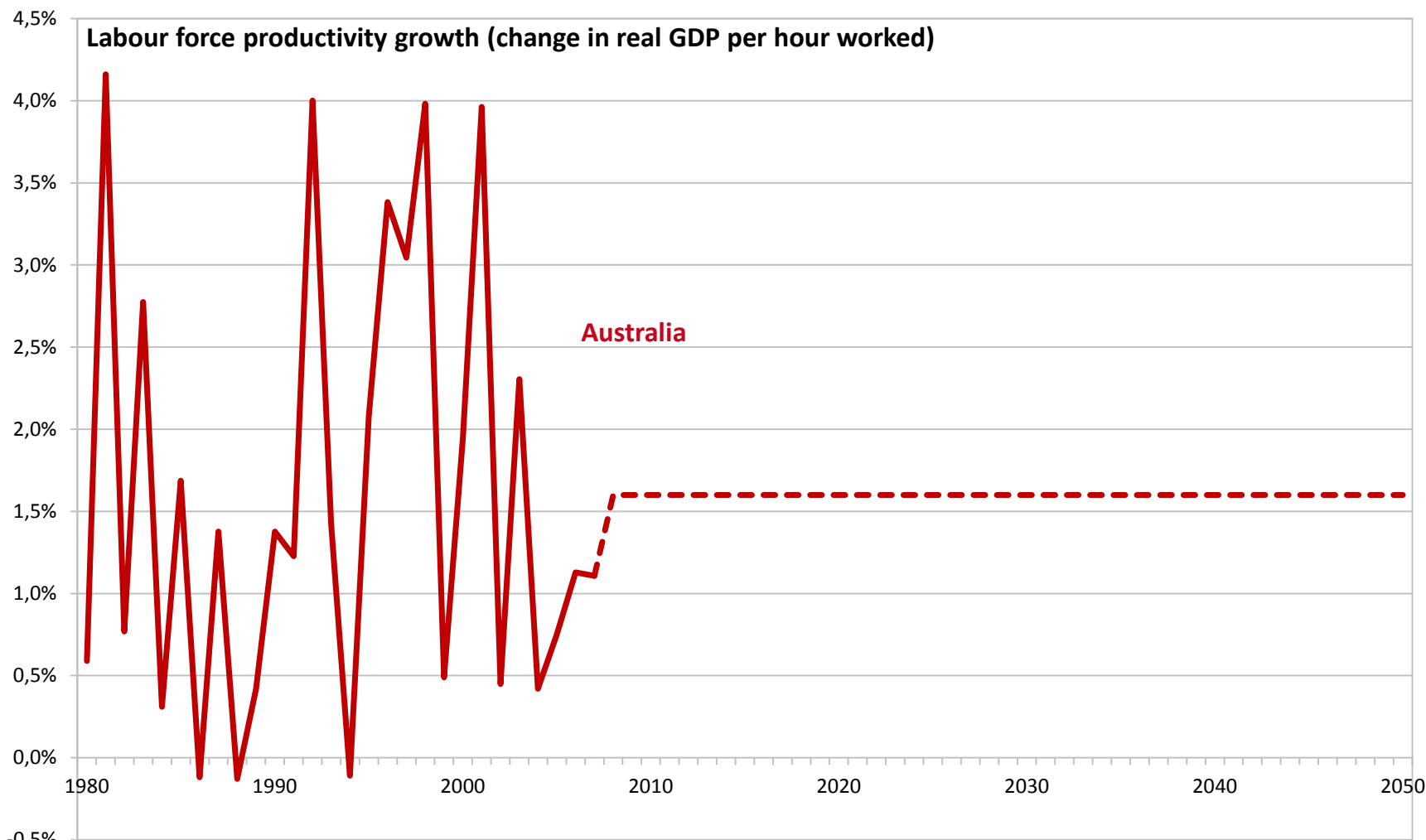
Economic context: Participation



Economic context: Participation



Economic context: Productivity



Population ageing in Australia

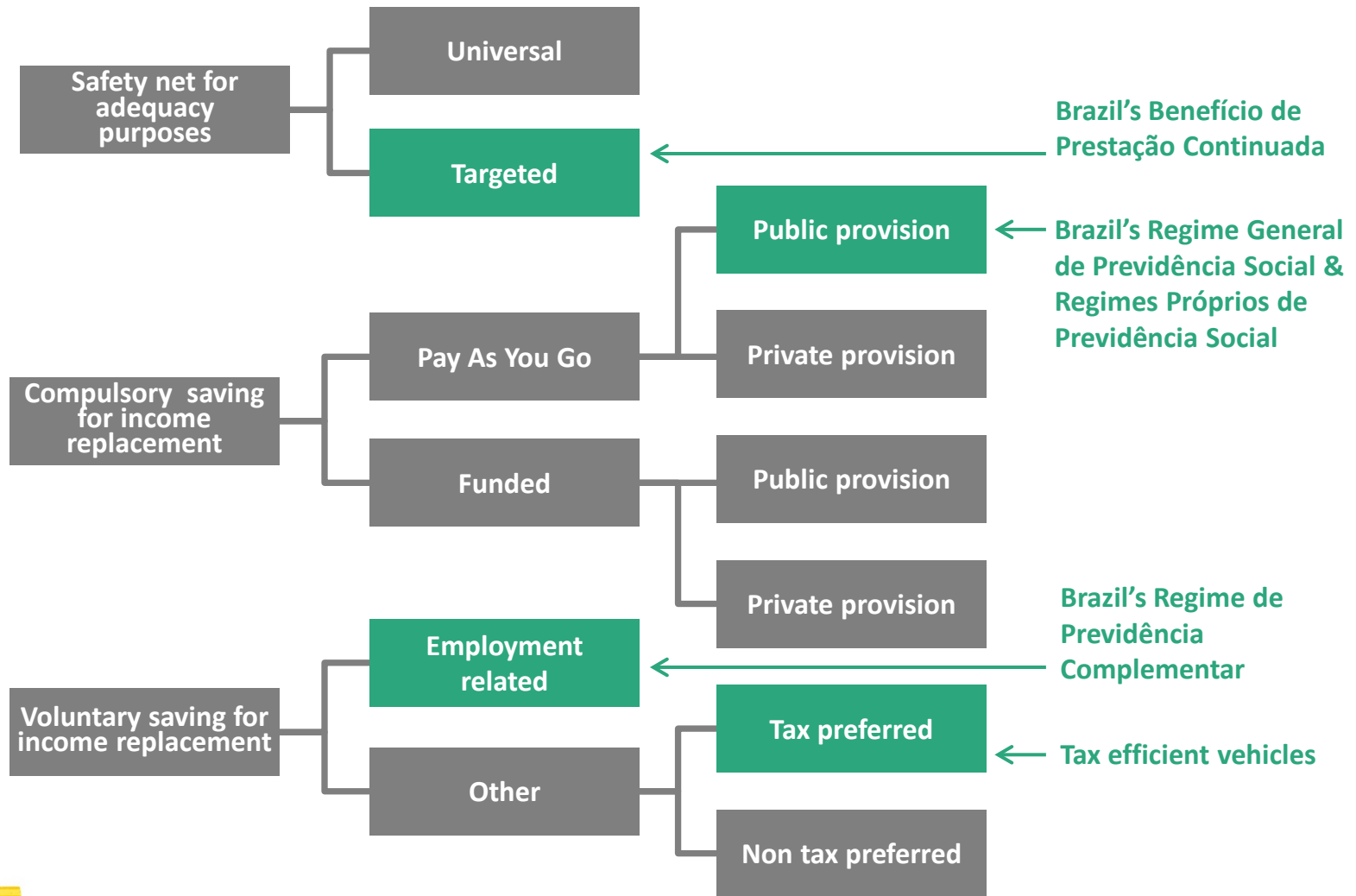
Demographic context

Economic context

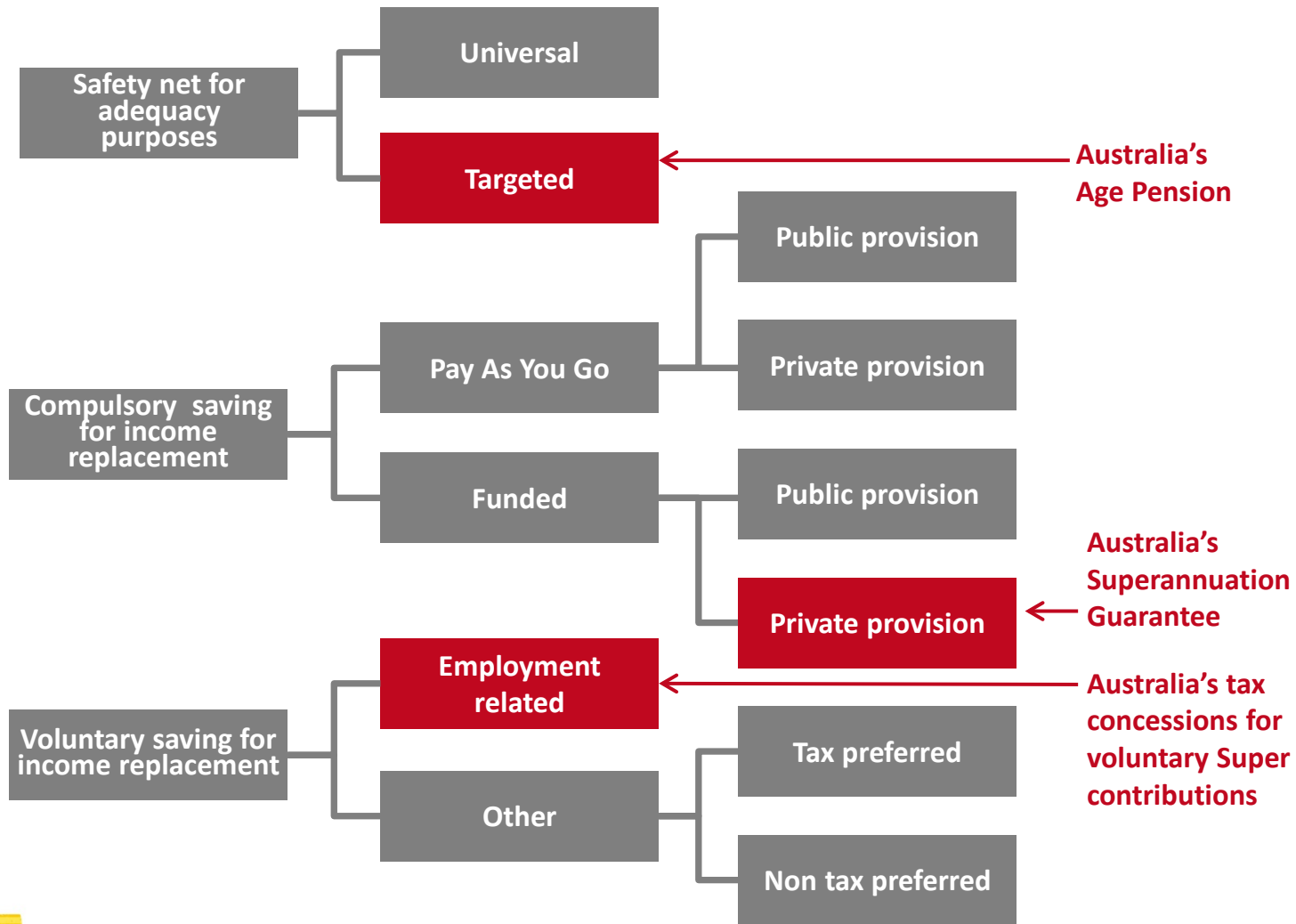
Policy context → (1) Pensions
Fiscal Projections (2) Health
Issues (3) Aged care



Policy context: Pension system



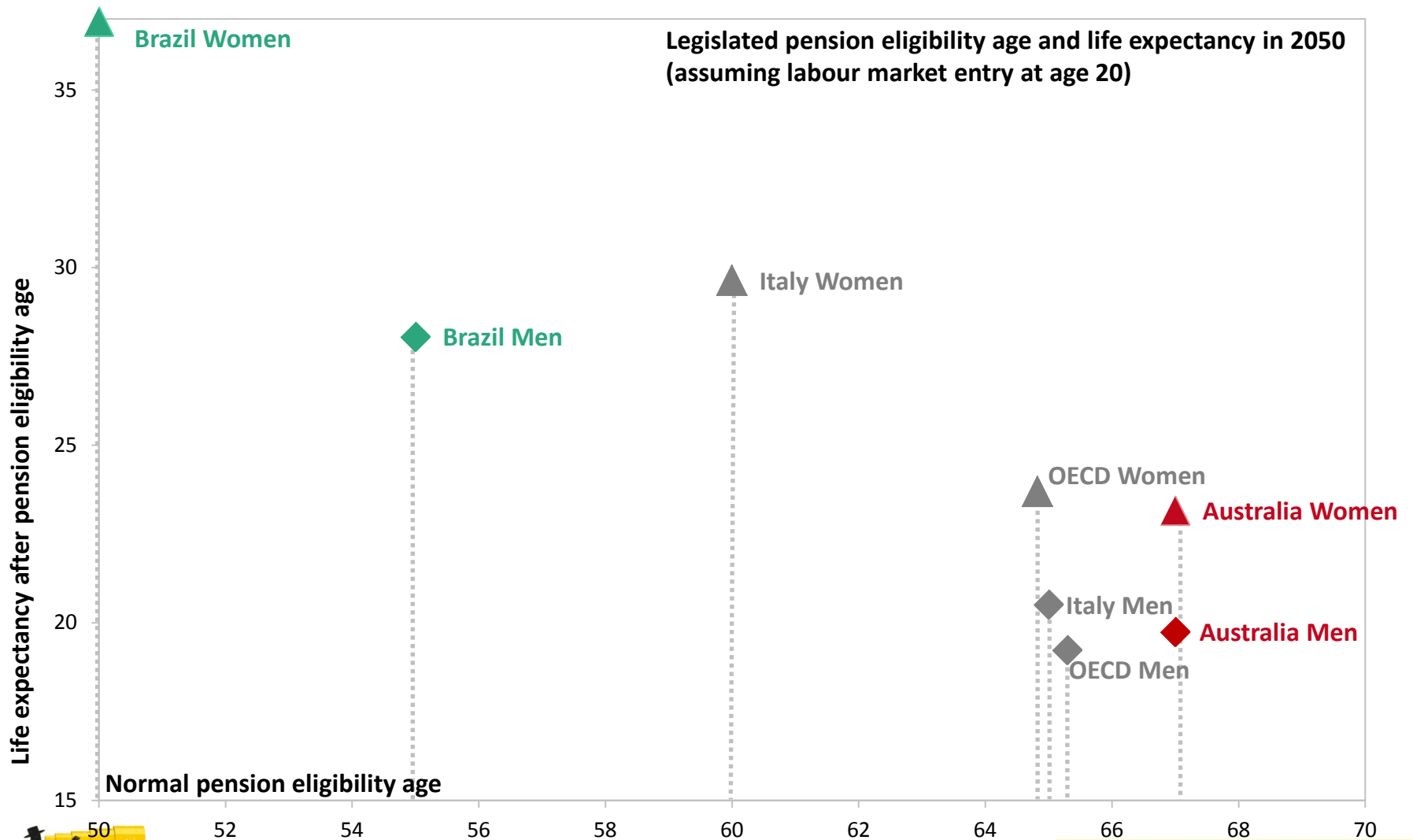
Policy context: Pension system



Policy context: Pension coverage

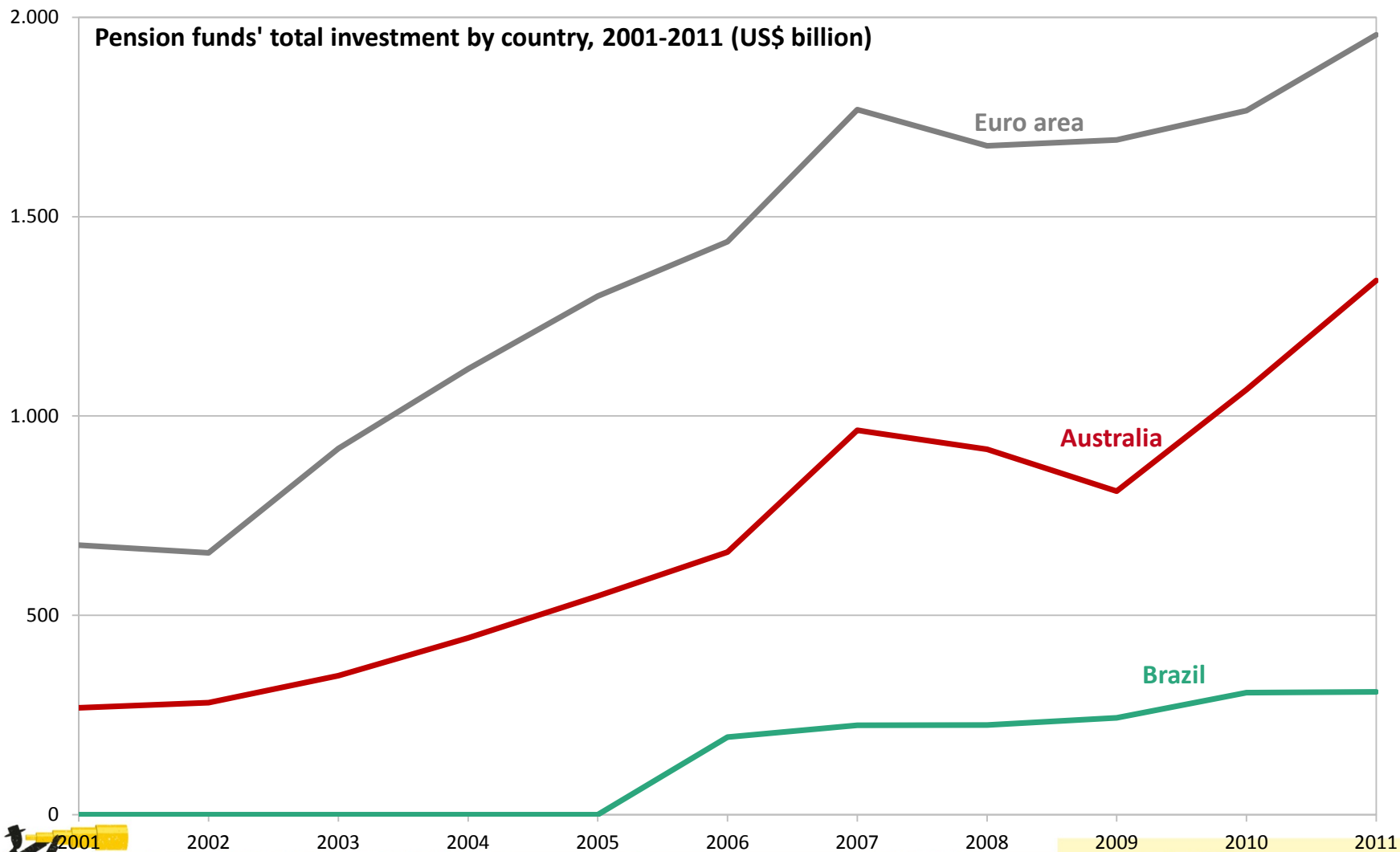


Policy context: Pension access age



Source: OECD 2011 'Pensions at a glance'; Author's calculations; Note: Based on adjusted life expectancy rates at 65 in 2050

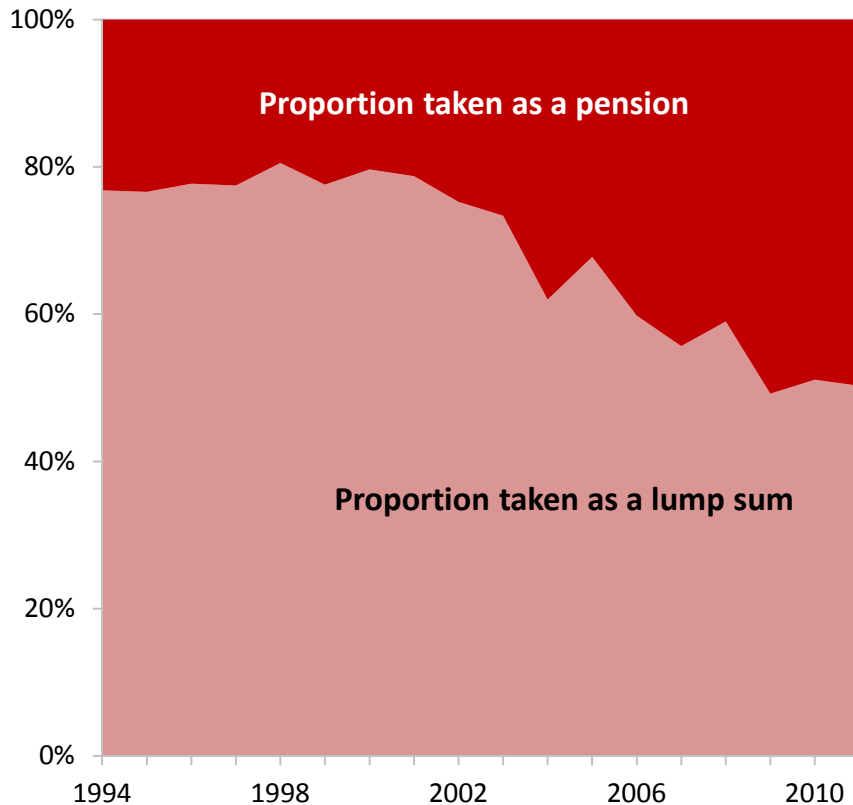
Policy context: Private pension assets



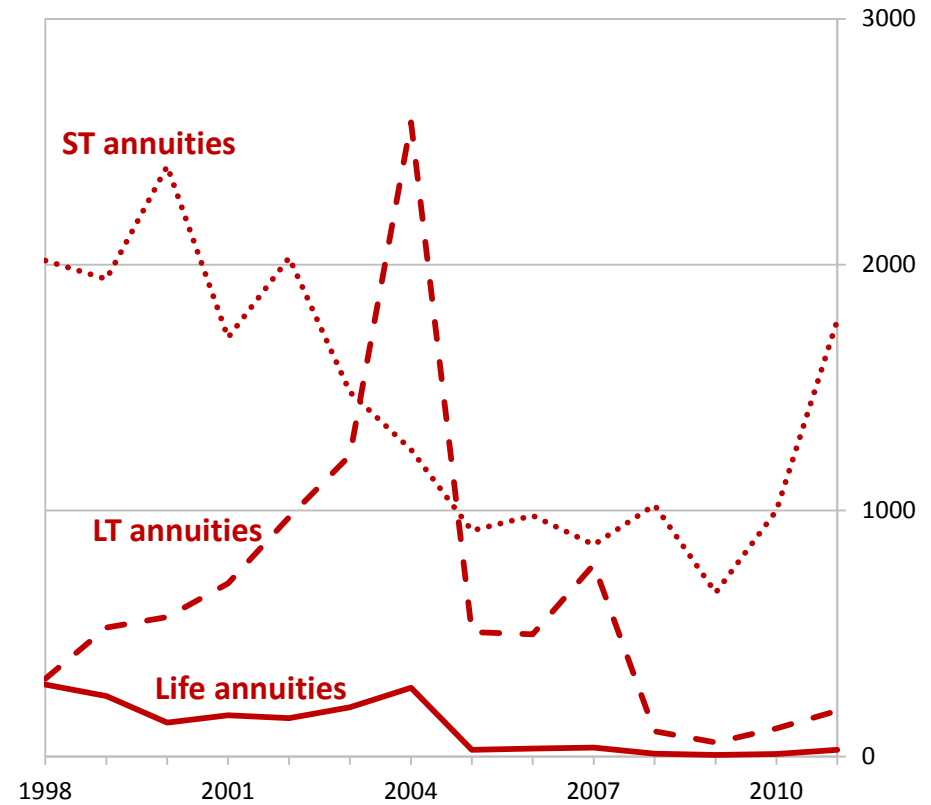
Source: OECD (2012) Pension Markets in Focus No.9, September 2012

Policy context: Private pension benefits

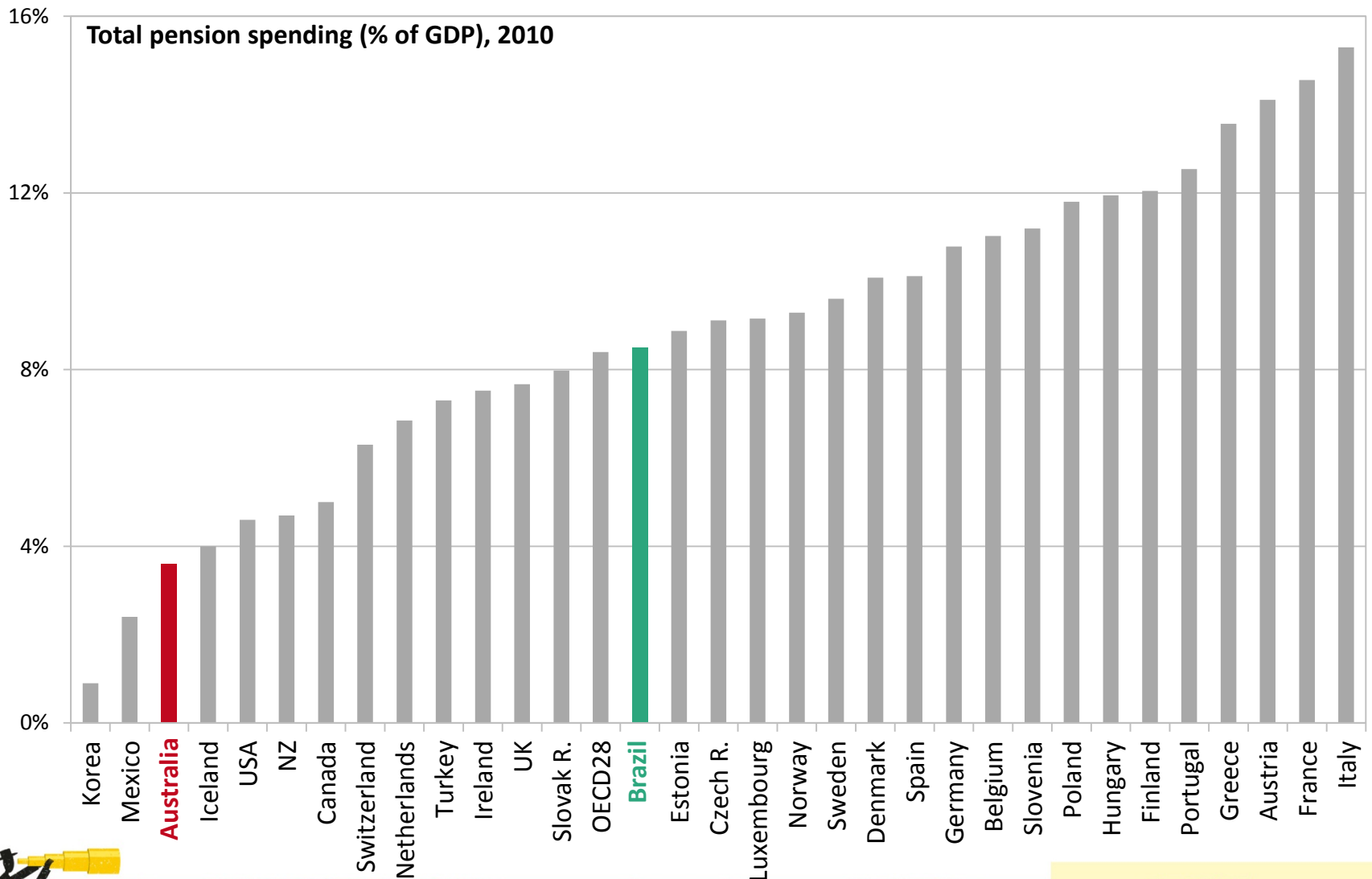
Structure of Superannuation pension benefits (% share)



Annuities purchased (\$ million, current)



Policy context: Public pension expenditure



Population ageing in Australia

Demographic context

Economic context

Policy context → (1) Pensions
Fiscal Projections (2) **Health**
Issues (3) Aged care



Policy context: Health system

Australia Public

Australia Private

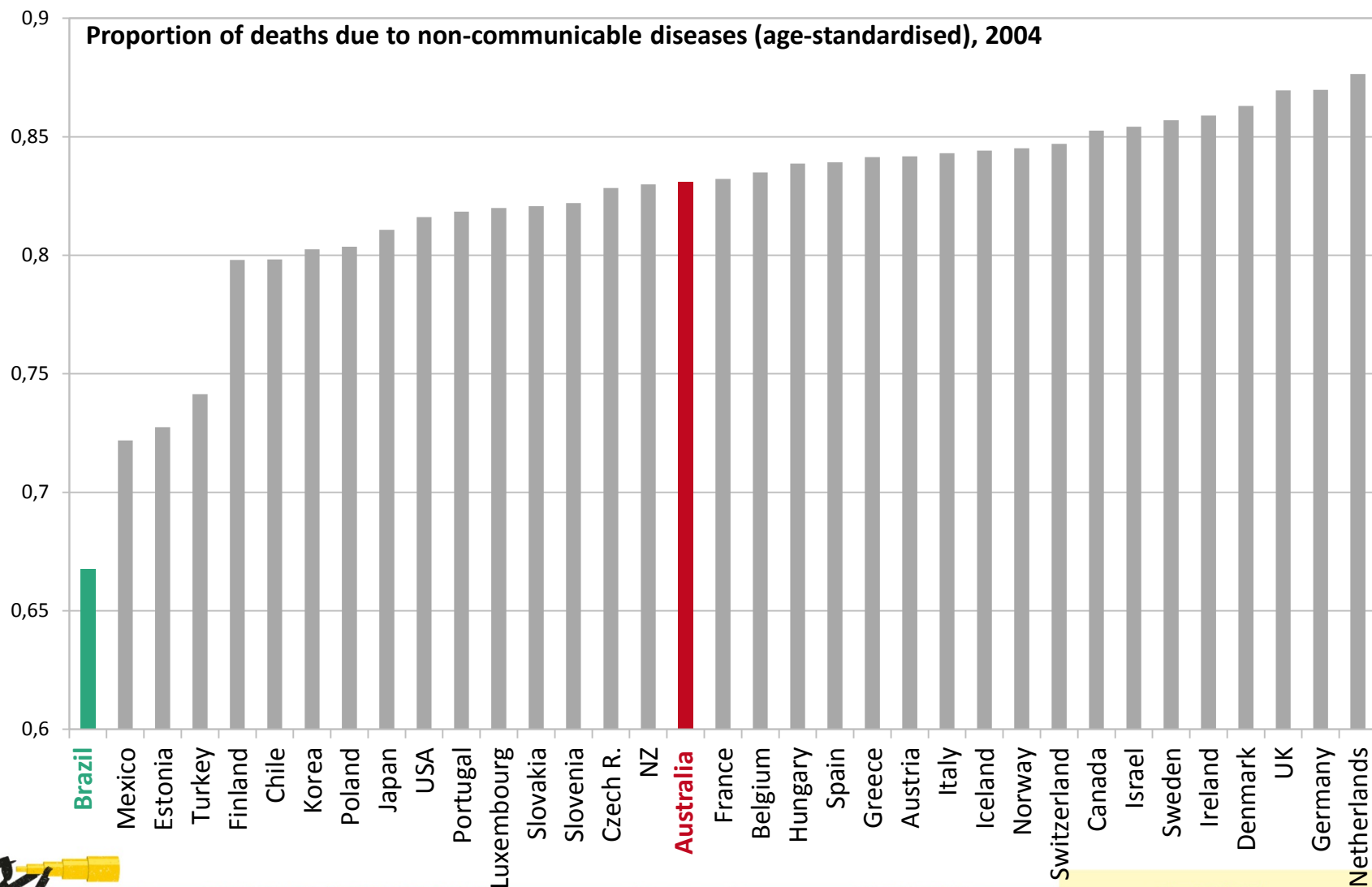
Brazil Public

Brazil Private

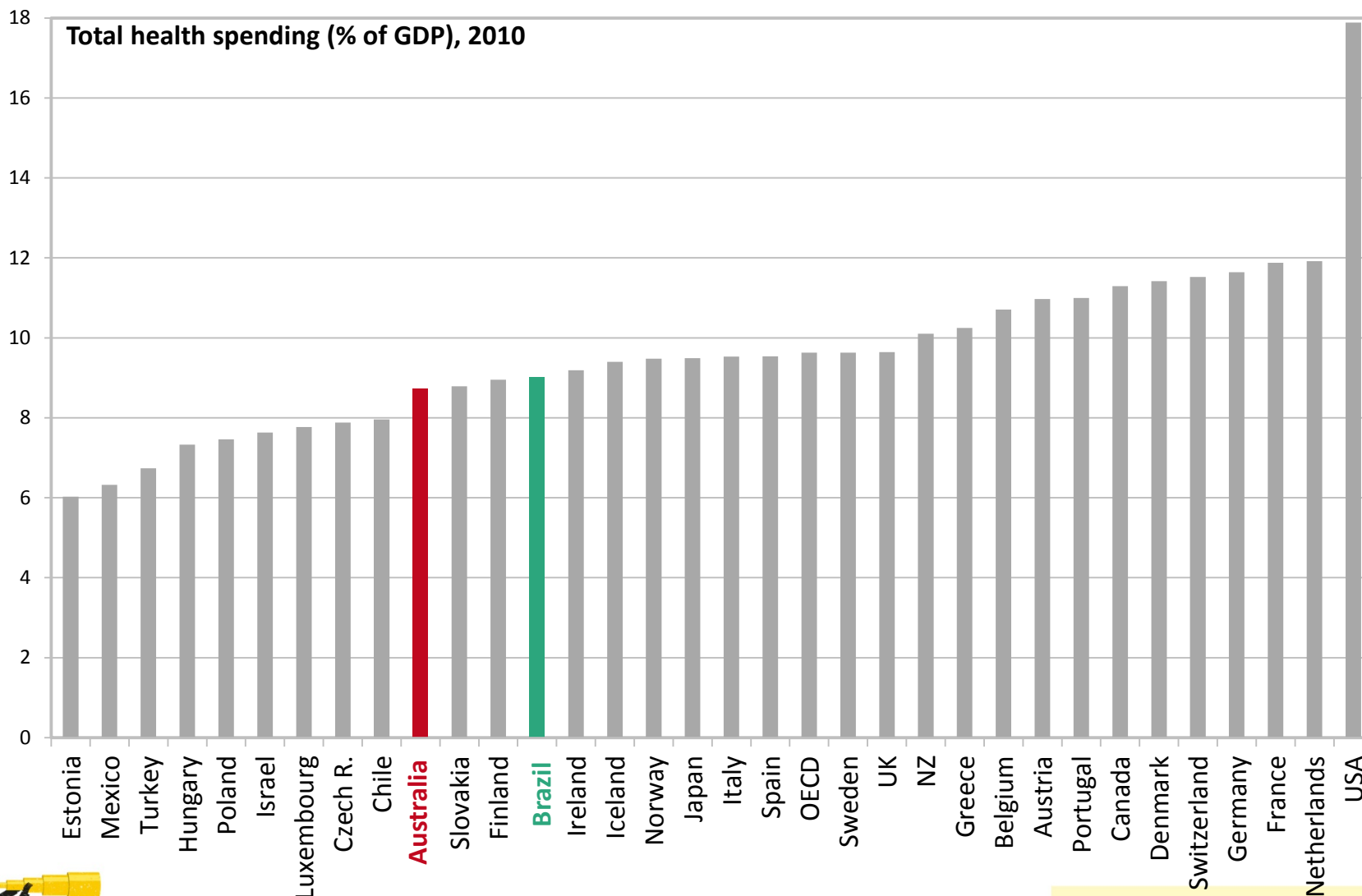
	Australia Public	Australia Private	Brazil Public	Brazil Private
Program	<ul style="list-style-type: none"> • Medicare • Since 1984 	<ul style="list-style-type: none"> • Voluntary • Mostly private insurance contracts 	<ul style="list-style-type: none"> • Sistema Único de Saúde • Highly decentralised • Since 1988 	<ul style="list-style-type: none"> • Voluntary • Mostly employer contracted hospitals or insurance companies
Coverage	<ul style="list-style-type: none"> • All residents • Some means testing for pharmaceuticals 	<ul style="list-style-type: none"> • About half of pop 	<ul style="list-style-type: none"> • Universal 	<ul style="list-style-type: none"> • Quarter of pop • Mostly employees
Funding	<ul style="list-style-type: none"> • General tax • 1.5% tax levy • +1% tax levy for rich 	<ul style="list-style-type: none"> • 30% rebate (means tested from 2012) • Waiver of 1% tax levy 	<ul style="list-style-type: none"> • General tax • Occupational insurance contributions 	<ul style="list-style-type: none"> • Private hospitals subsidised by SUS
Benefits	<ul style="list-style-type: none"> • Hospitals • Medical free/subsidised • Ancillary at public hosp • Pharmaceutical purchase scheme to lower costs + subsidies for poor 	<ul style="list-style-type: none"> • 47% of pop hospital • 54% of pop ancillary • 14% of ins ancillary only • 86% of ins hosp+ancillary • 0% of ins hospital only 	<ul style="list-style-type: none"> • Hospitals • Medical practitioners • Basic ancillary • State pharmacies for common diseases • But variability, standard & waiting list issues 	<ul style="list-style-type: none"> • Hospitals • Medical practitioners • Ancillary



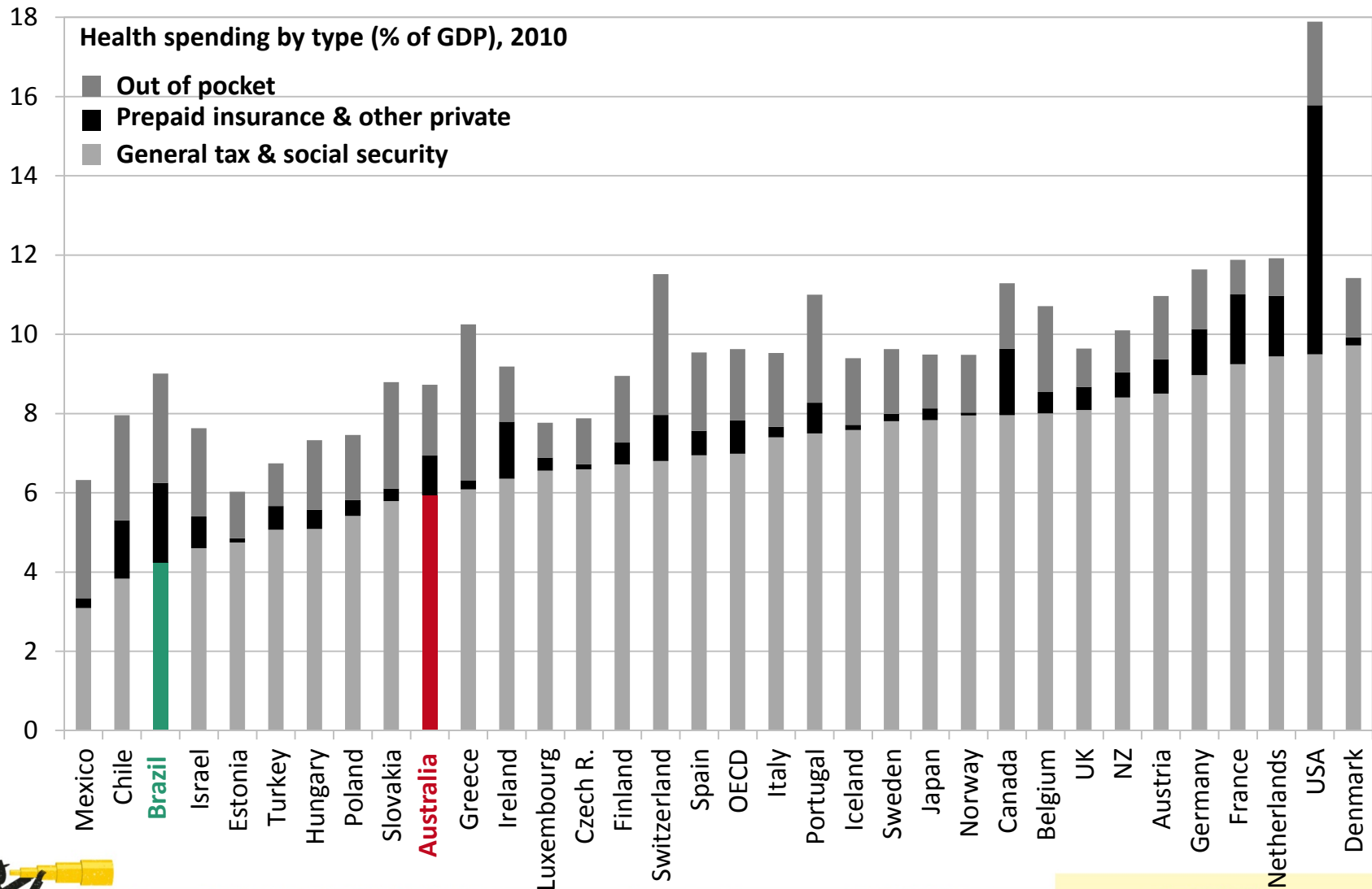
Policy context: Health needs



Policy context: Health expenditure



Policy context: Health expenditure split



Population ageing in Australia

Demographic context

Economic context

Policy context → (1) Pensions
Fiscal Projections (2) Health
Issues (3) Aged care



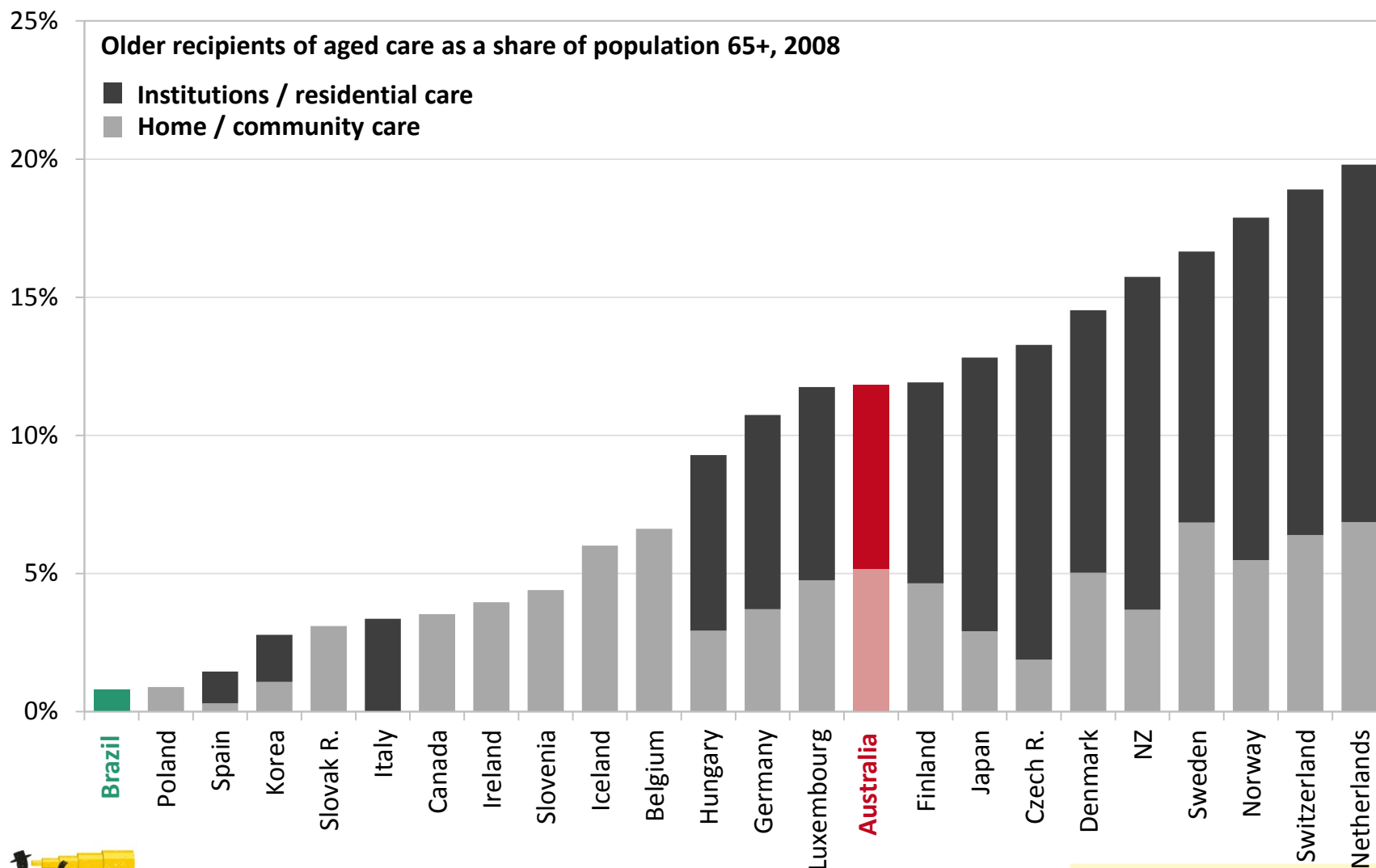
Policy context: Aged care system

Australia

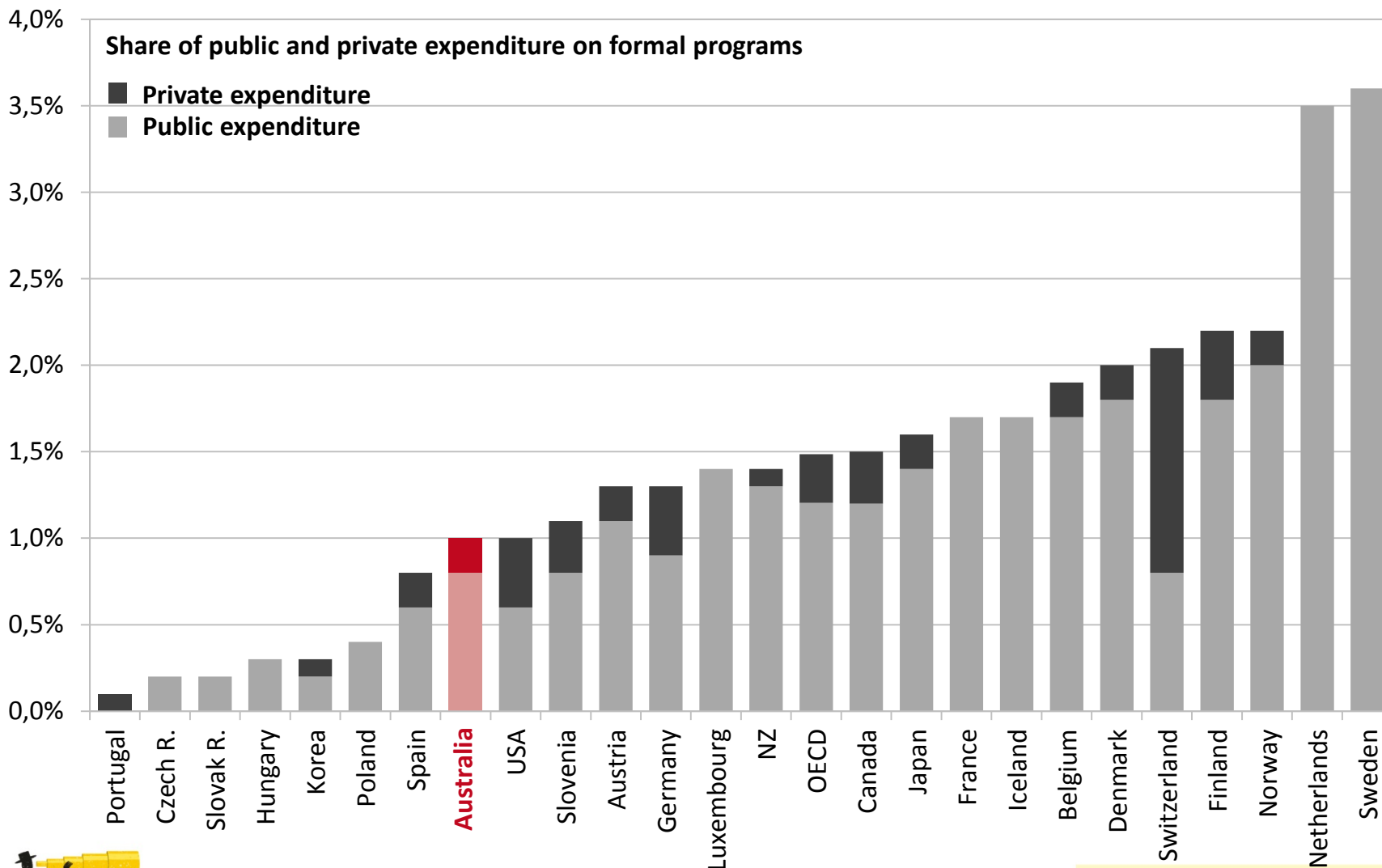
Program	<ul style="list-style-type: none">• Home & Community Care (multiple programs)• Residential Care
Coverage	<ul style="list-style-type: none">• Universal for people age 65+
Funding	<ul style="list-style-type: none">• 60% federal and 40% other government• Means-testing / co-payment limits expenditure
Benefits	<ul style="list-style-type: none">• In-kind, home and institutional care• Depend on assessment of need (low, med, high)• Assessment of activity, behaviour, med. complexity



Policy context: Aged care programs



Policy context: Aged care expenditure



Population ageing in Australia

Demographic context

Economic context

Policy context

Fiscal Projections →

Issues

(1) Denominator: GDP
(2) Nominator: Pension,
Health, Aged care cost
(Australian Treasury
modelling framework)



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Fiscal projections: GDP

$$GDP = \frac{GDP}{Hrs} \times \frac{Hrs}{Emp} \times \frac{Emp}{LF} \times \frac{LF}{Pop15+} \times Pop15+$$

Labour productivity

Average hours worked

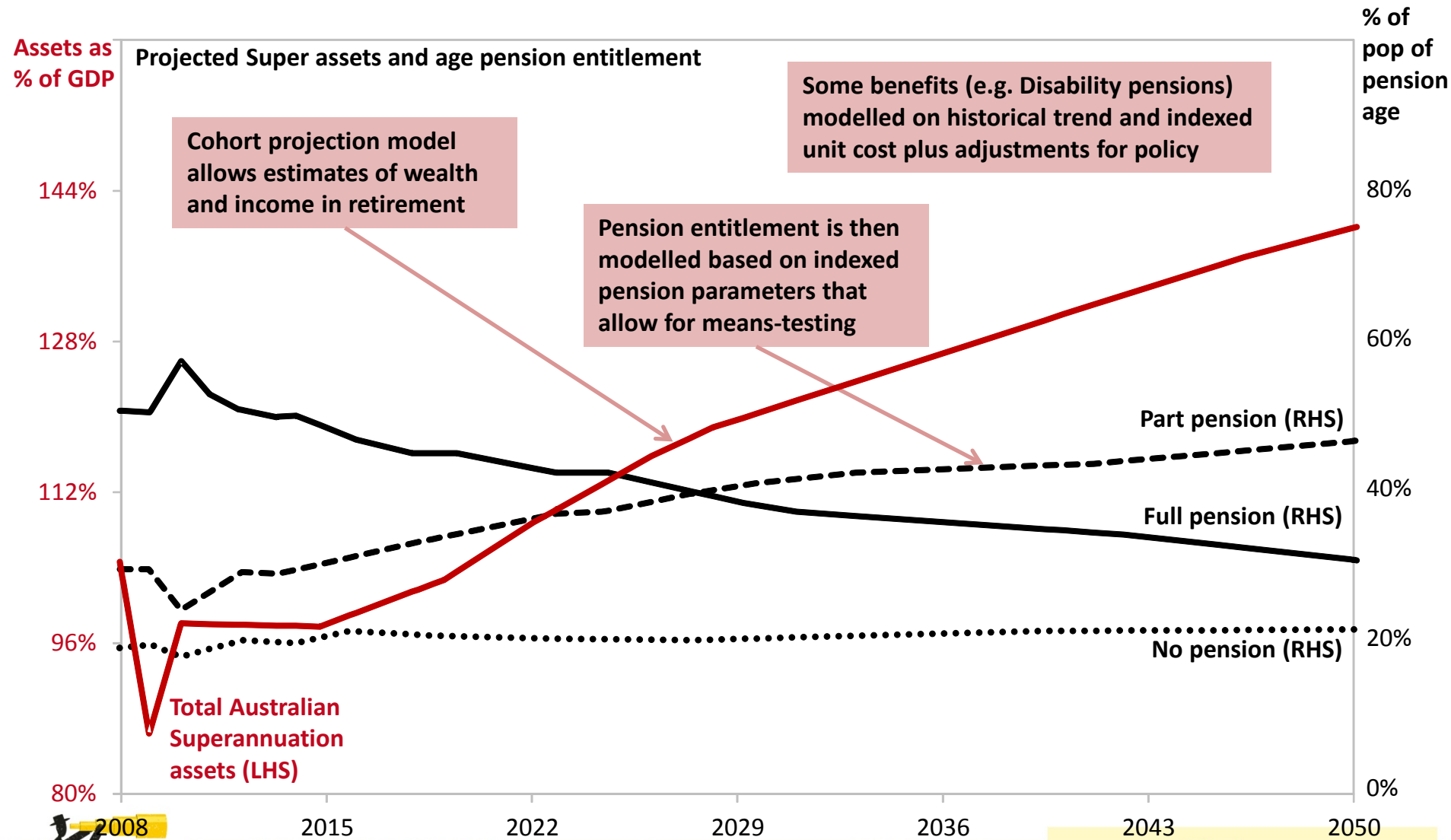
Employment ratio

Participation rate

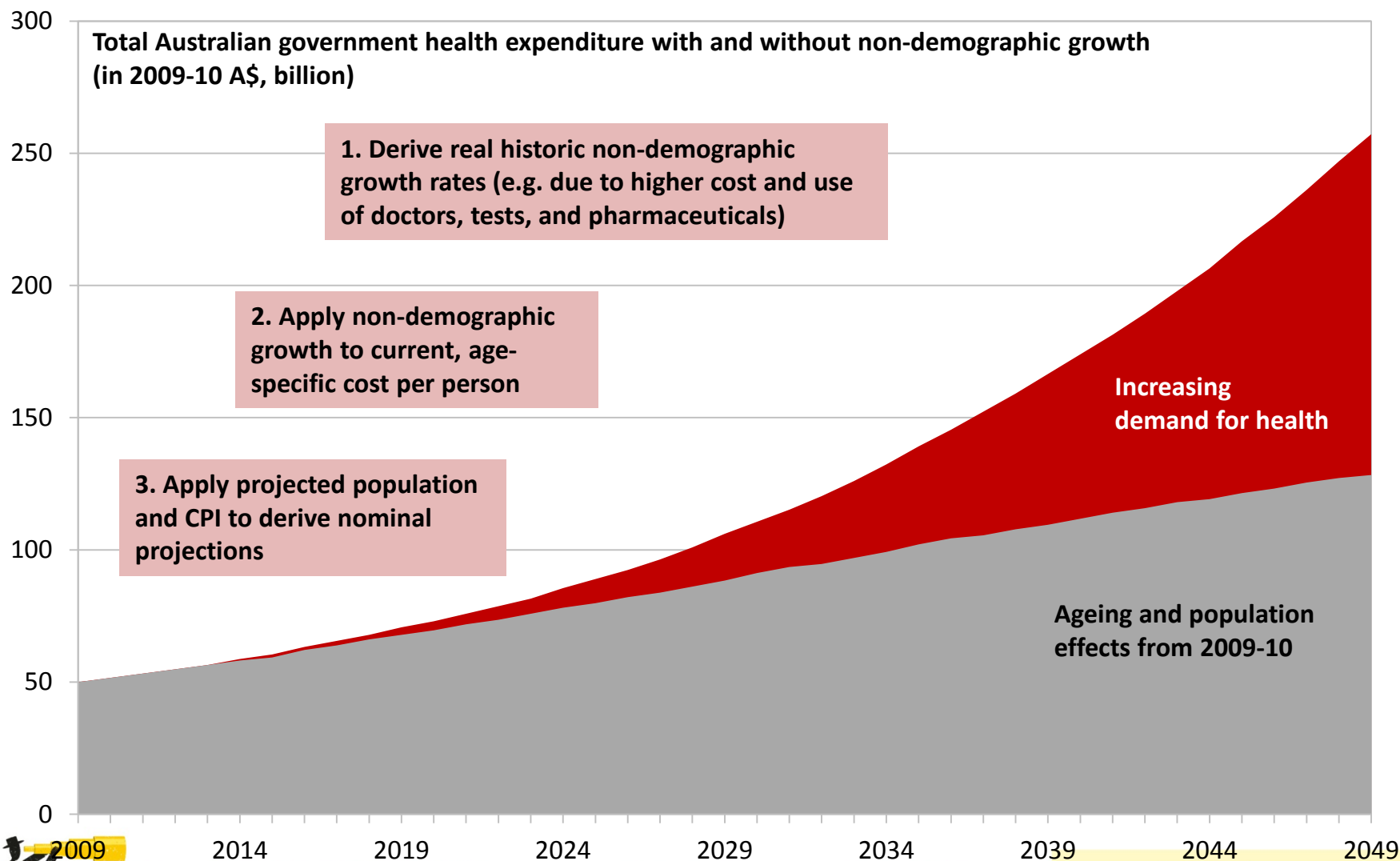
Population aged 15 and above



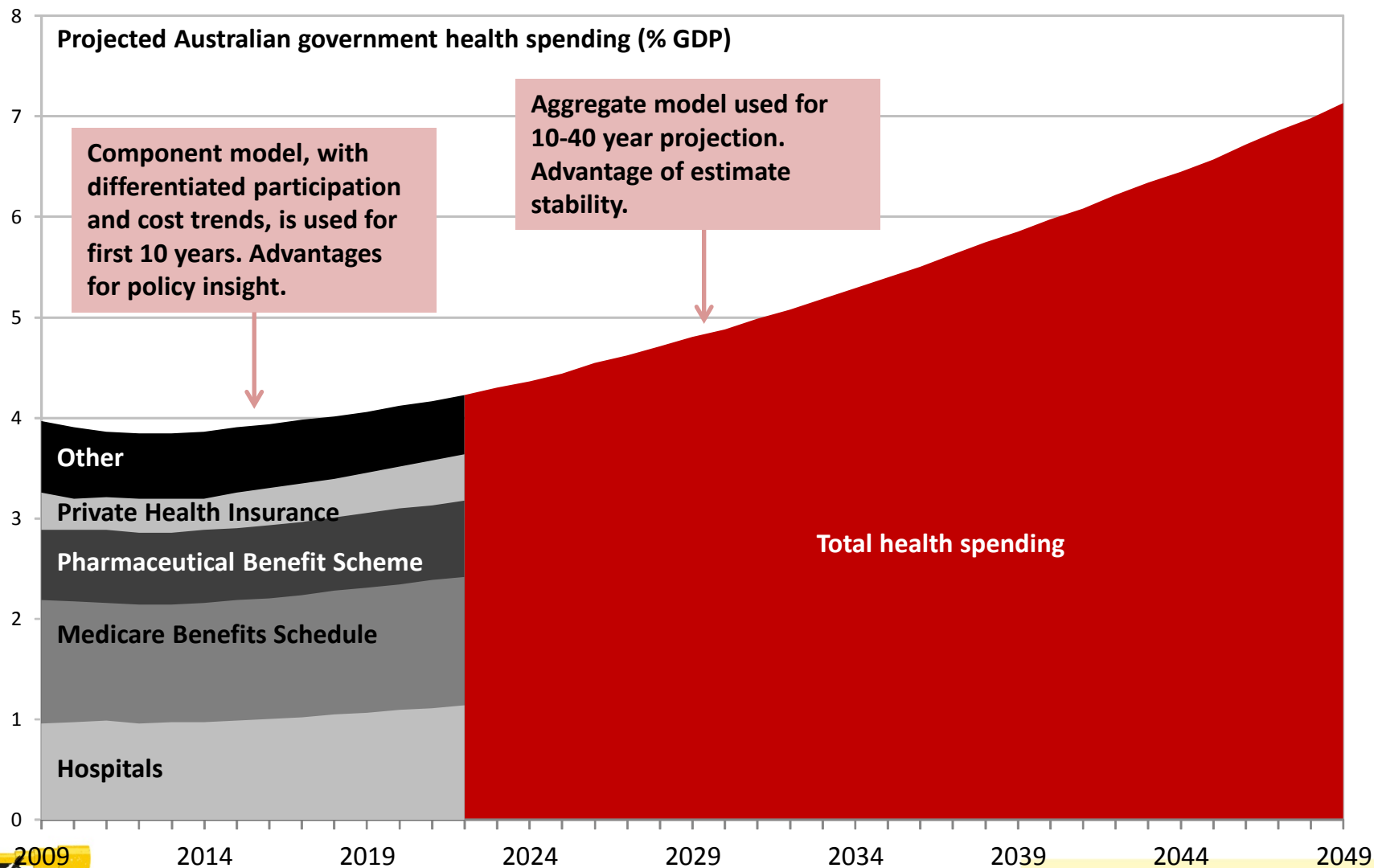
Fiscal projections: Pension expenditure



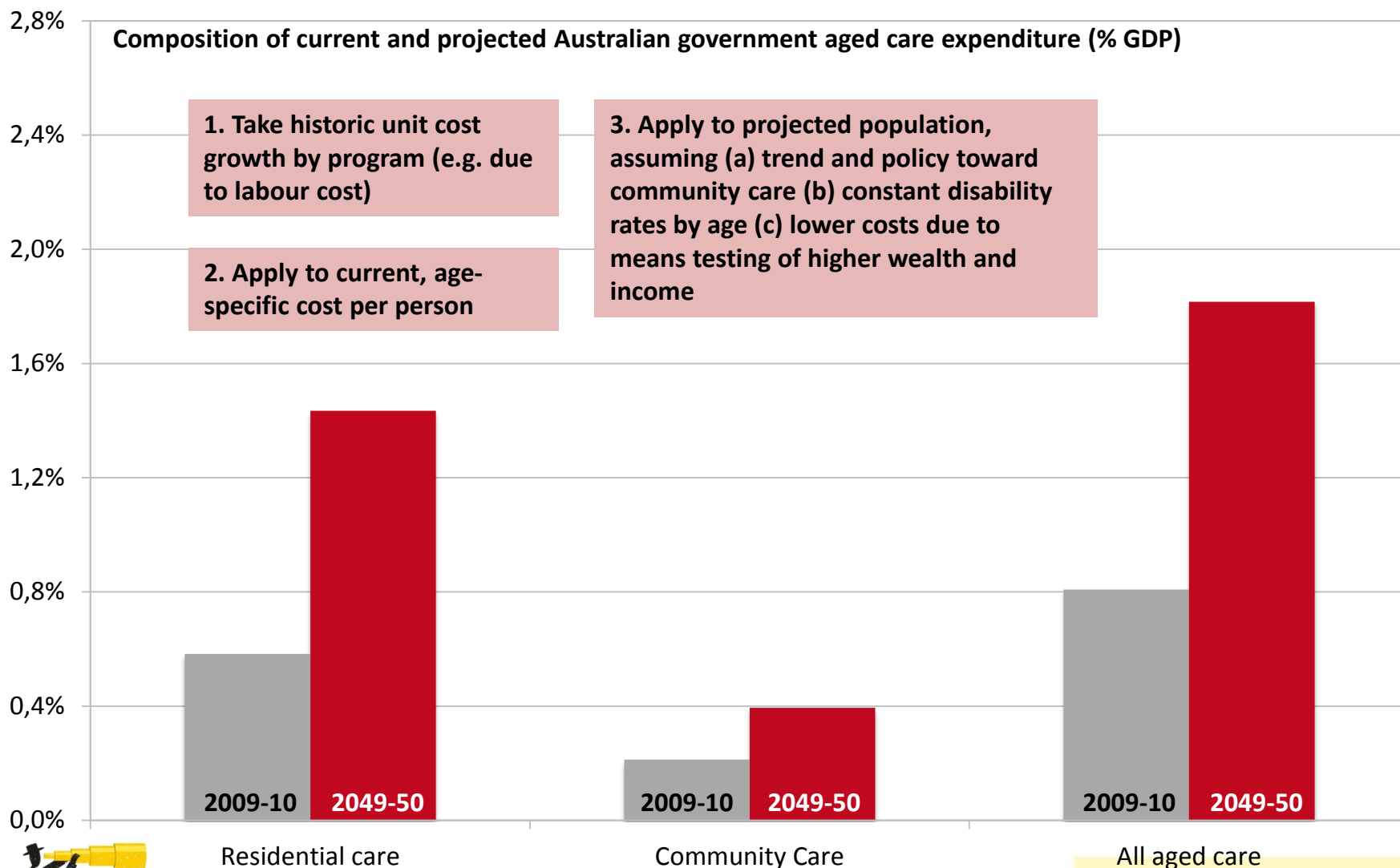
Fiscal projections: Health expenditure



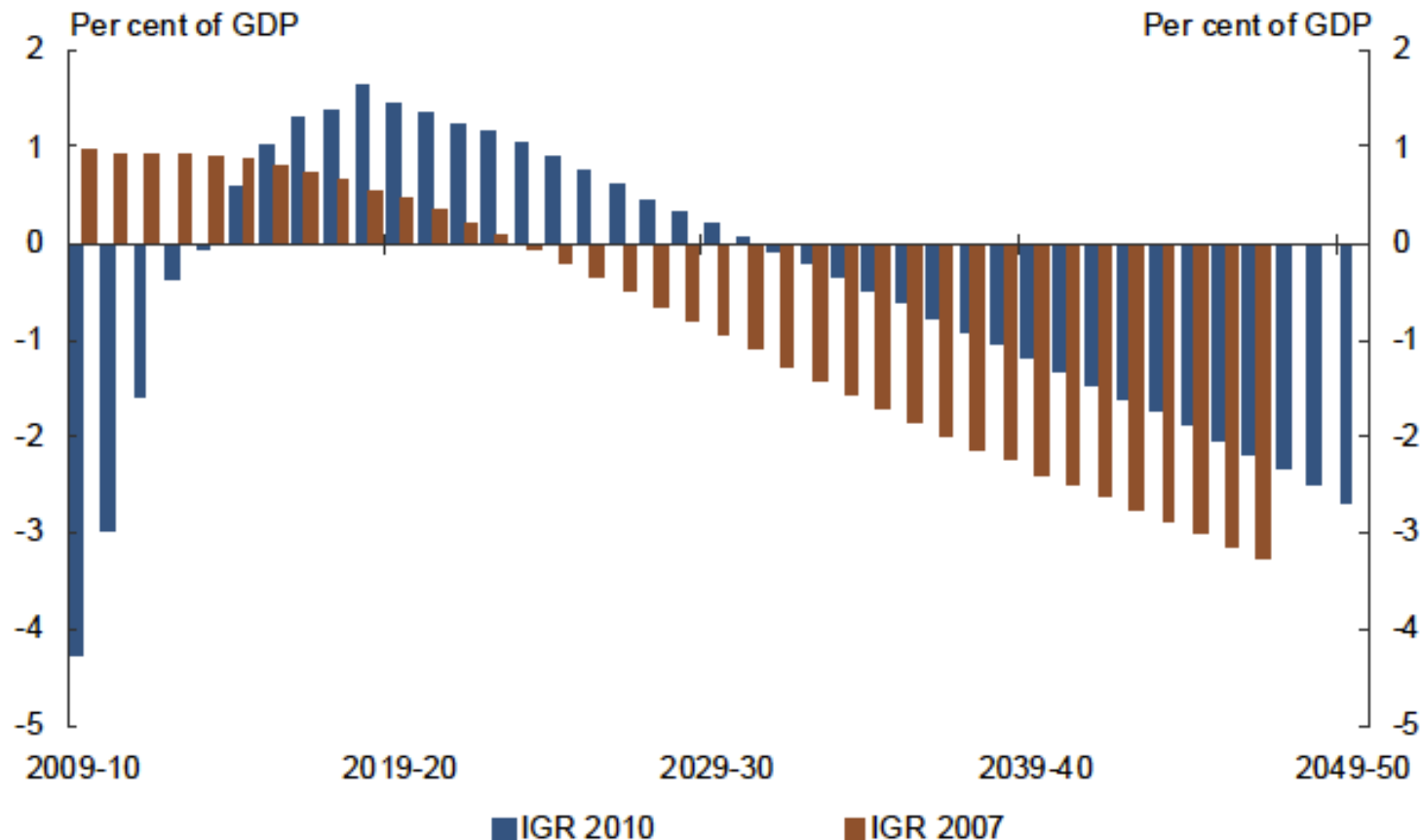
Fiscal projections: Health expenditure



Fiscal projections: Aged care expenditure



Projected Fiscal Gap



Note: The fiscal gap is total Australian government receipts minus total Australian government payments (excluding interest).

Source: Treasury projections.



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Population ageing in Australia

Demographic context

Economic context

Policy context

Fiscal Projections

Issues



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Projection issues

- Overall **commendable** and internally consistent modelling
- Some assumptions better as **scenarios** (e.g. fertility)
- Some assumption **myopia** (e.g. migration, participation)
- Some assumptions **unclear** (e.g. Super decumulation)
- Some assumptions **imperfect** (e.g. non-demographic health cost growth not linked to income by age)
- Assumption / methodological **variation** between projections
- No **policy** options or specific policy / budget related breakdowns to judge policy change
- If it is an **assessment** of fiscal sustainability, does a projected deficit (2.75%) mean governments failing assessment?





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Questions?

