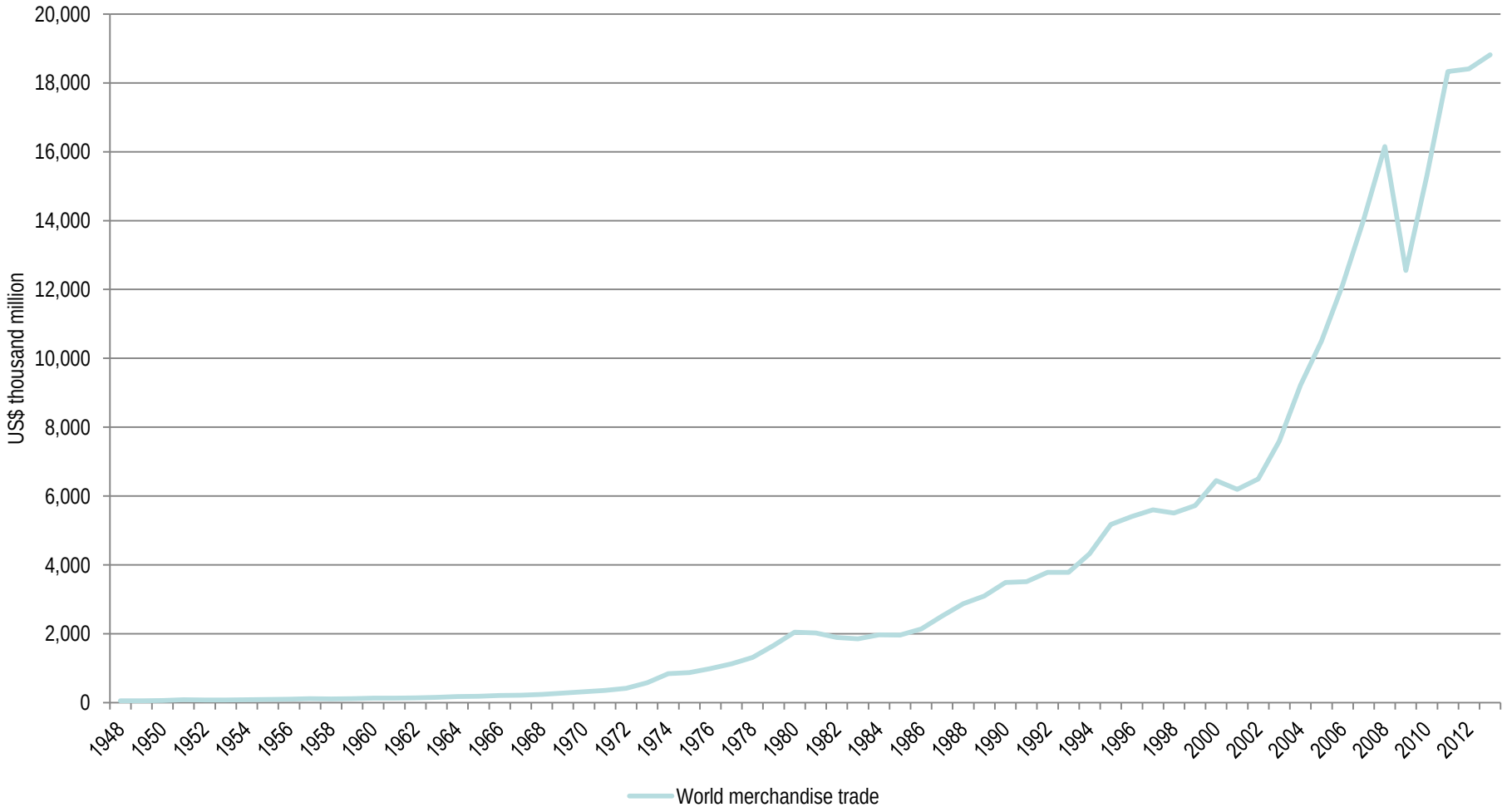
Australian Government
Department of Infrastructure and Regional Development
Bureau of Infrastructure, Transport and Regional Economics

The effect of international trade patterns on house prices: A geographer's perspective

Warwick Jones

Global trade in merchandise goods 1948-2013

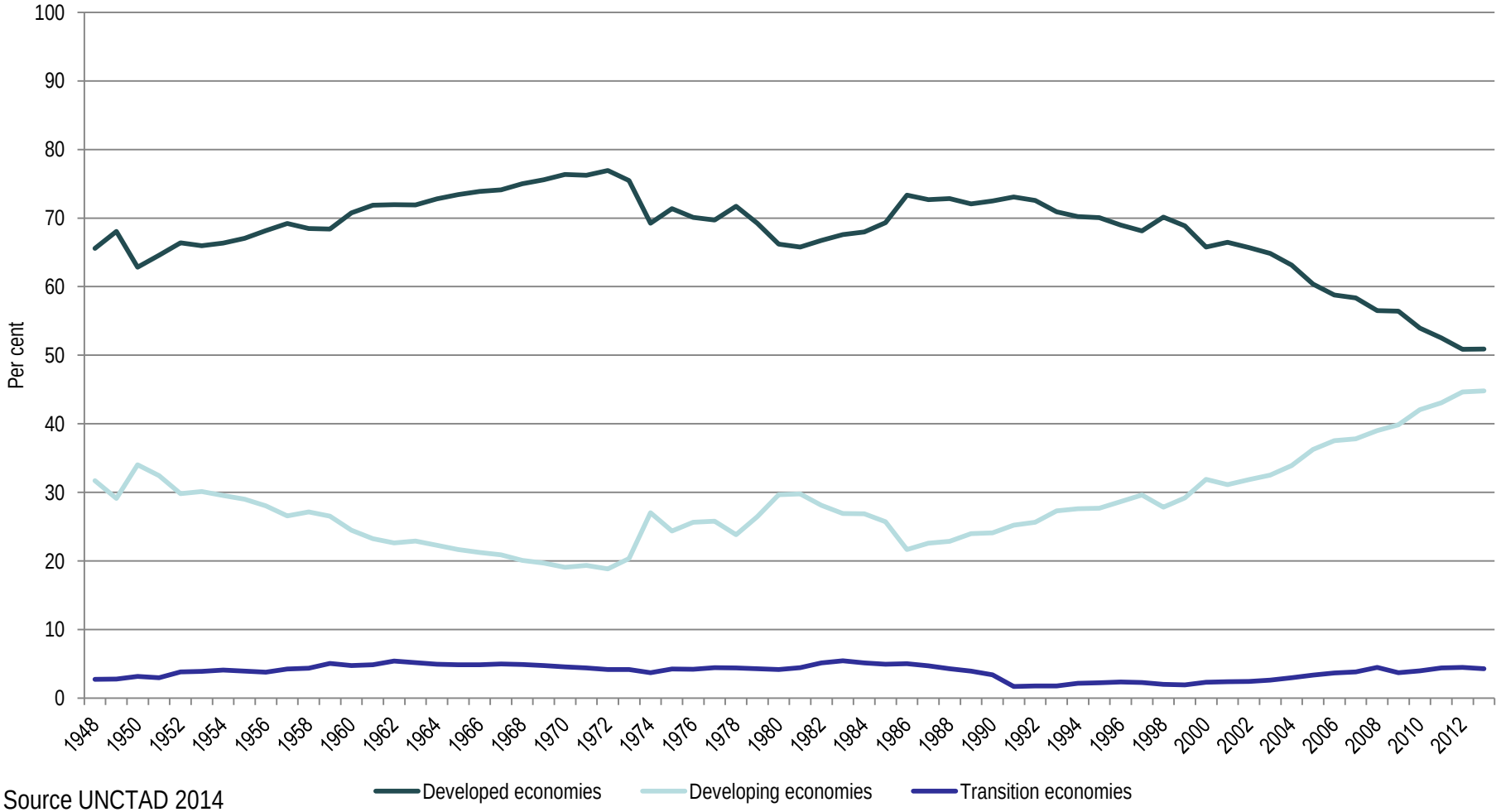


Source: UNCTAD 2014

Exports of goods and services as a percentage of global GDP

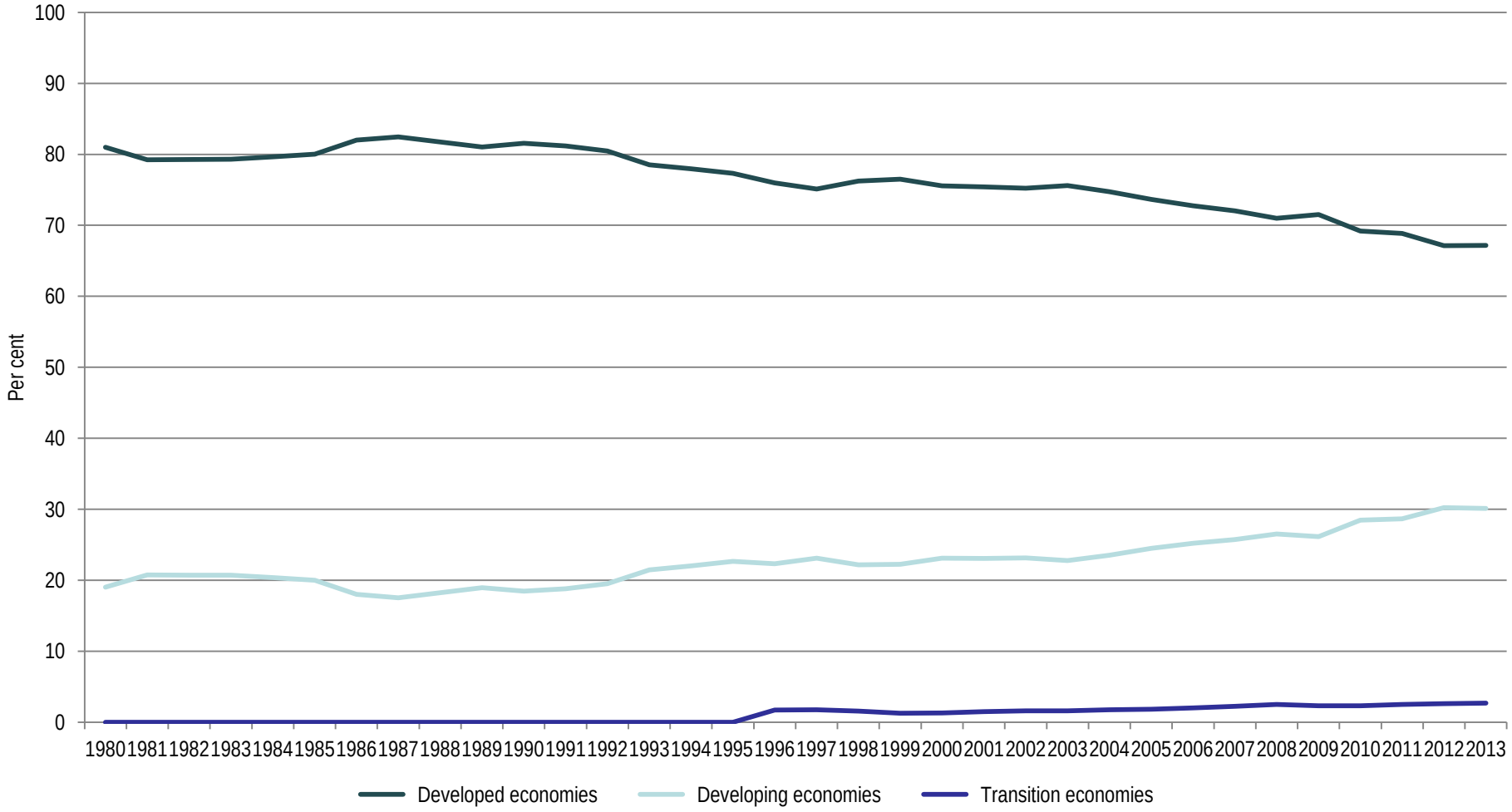
Source: World Bank 2014

Proportion of global merchandise trade by developed, developing and transition economies 1948-2013



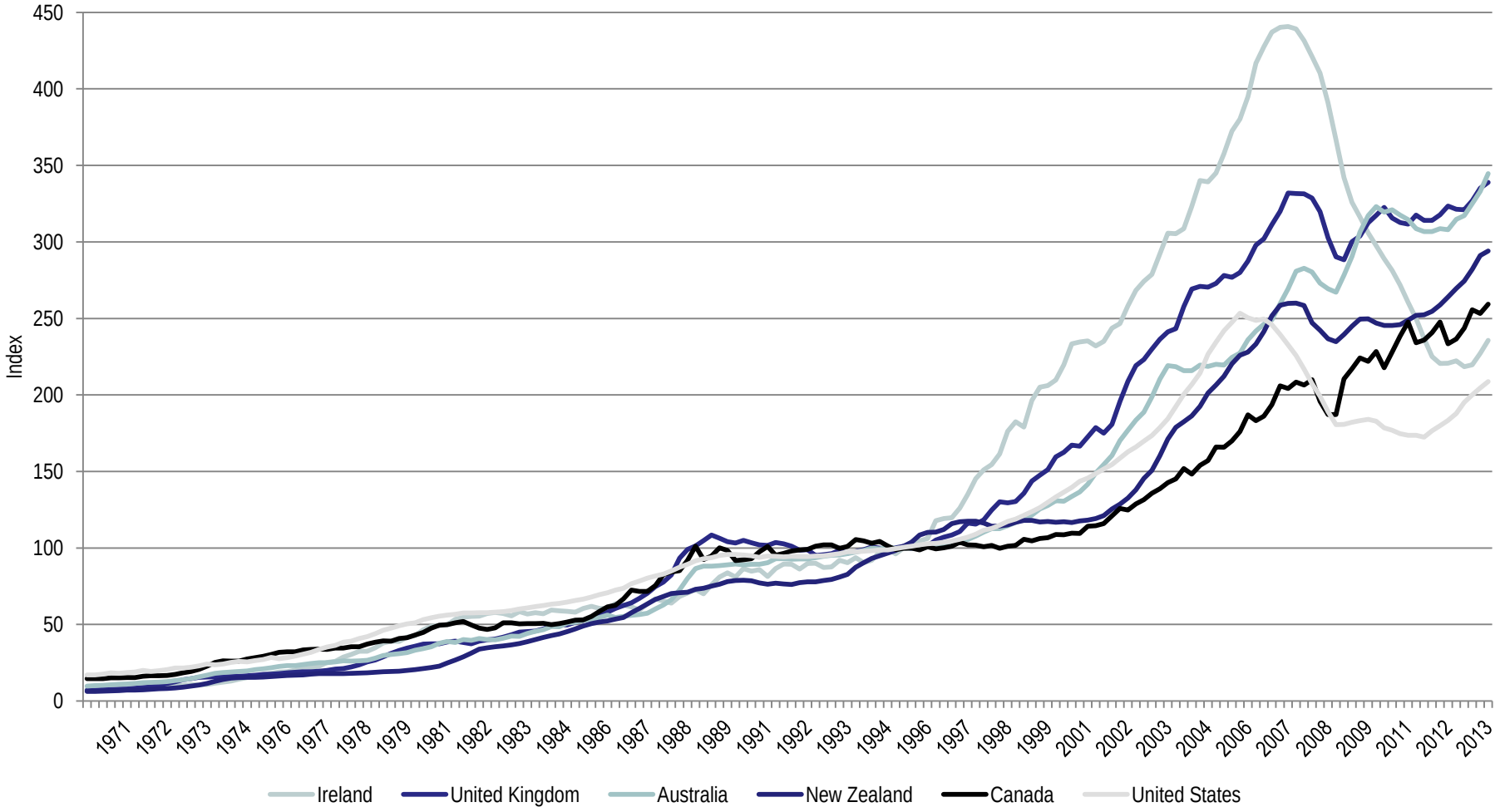
Source UNCTAD 2014

Proportion of global services trade by developed, developing and transition economies



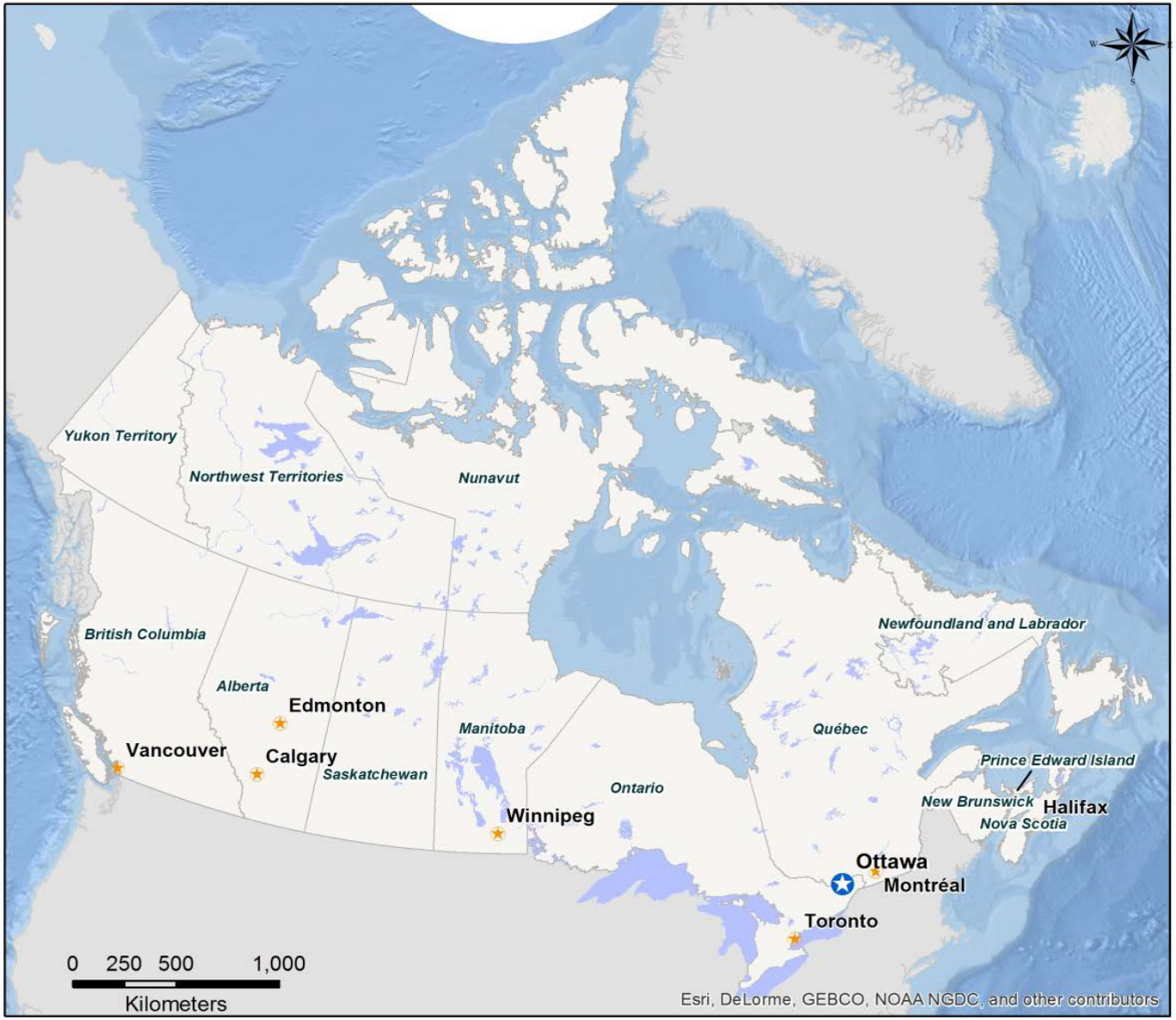
Source: UNCTAD 2014

Ireland, UK, Australian, NZ, Canada and US house prices 1970-2013

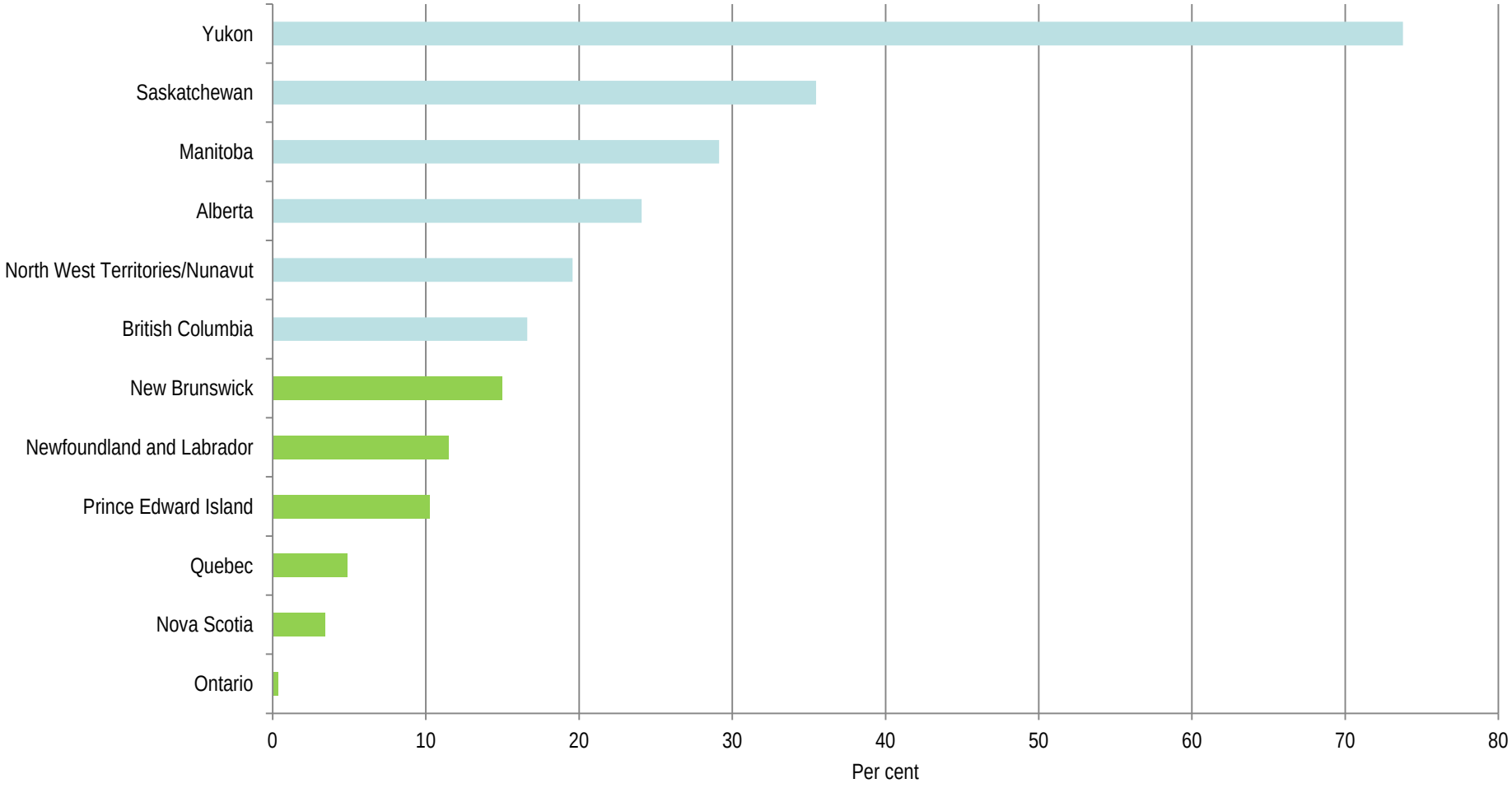


Source: Bank of International Settlements 2014

Canadian provinces and major cities

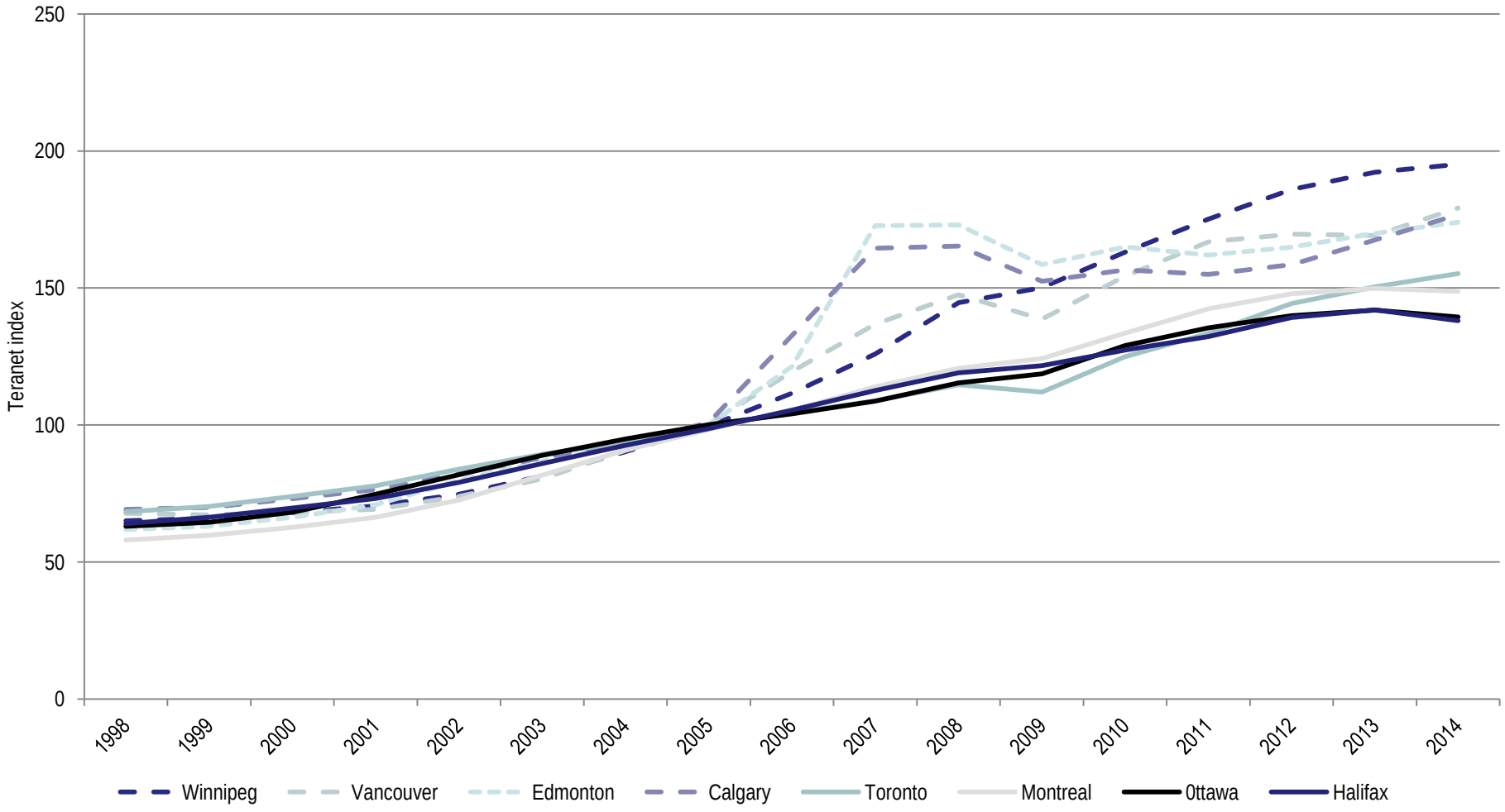


Percentage of growth in two way trade by Canadian province and territory 1981-2012

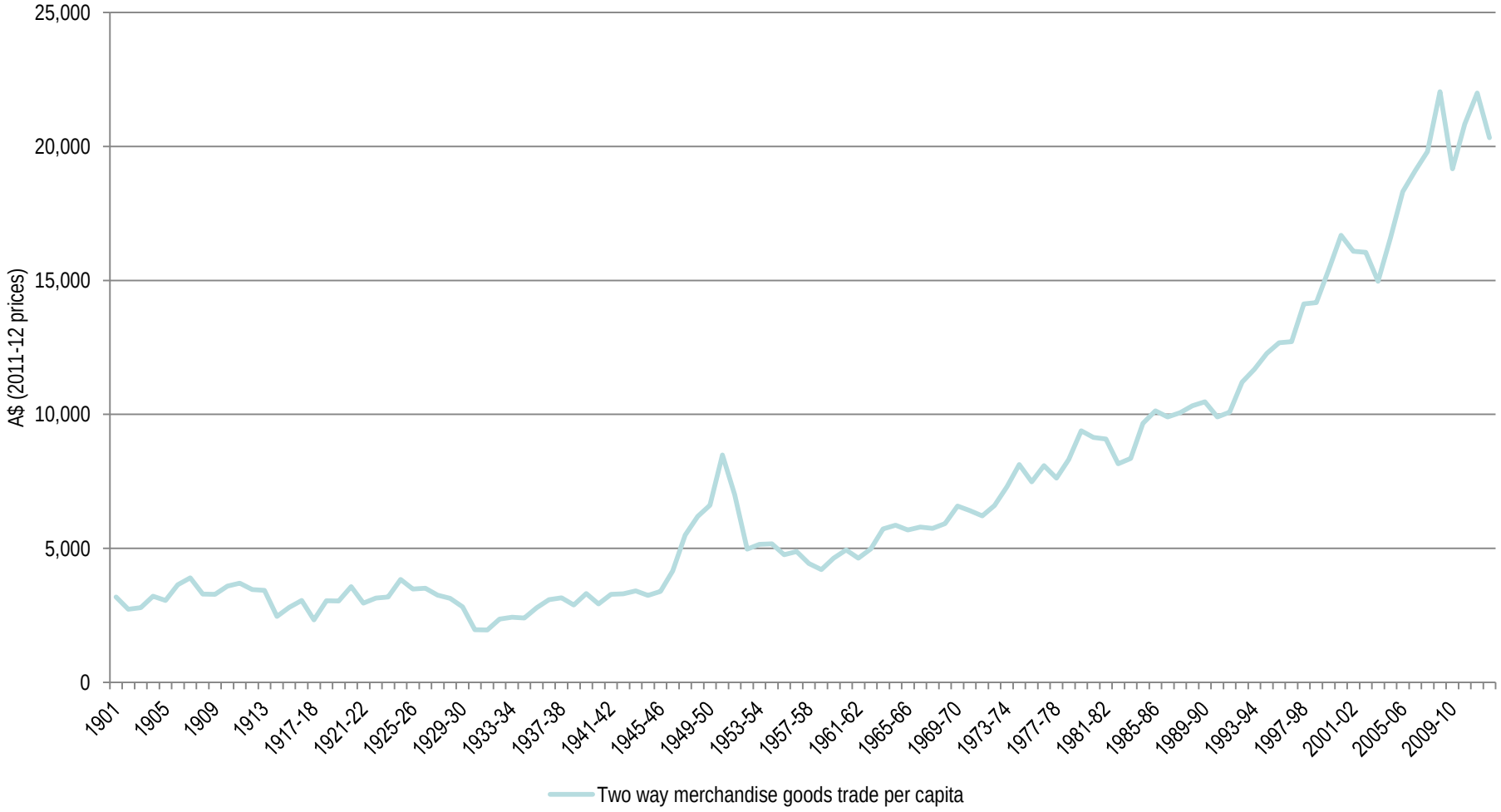


Statistics: Canada 2014

House prices in major Canadian cities 1998-2014

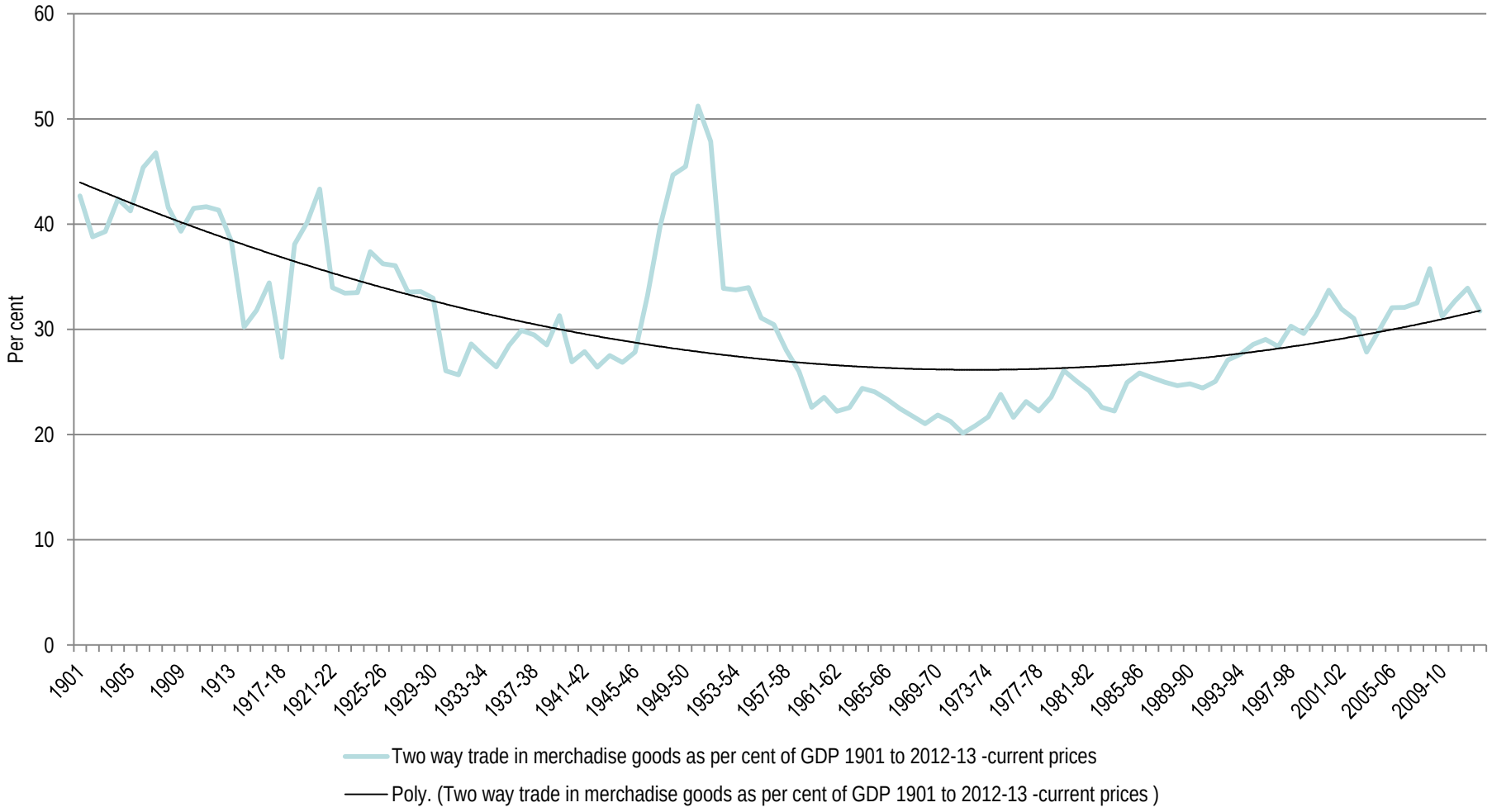


Australian two way trade in merchandise goods per capital 1901 to 2012-13



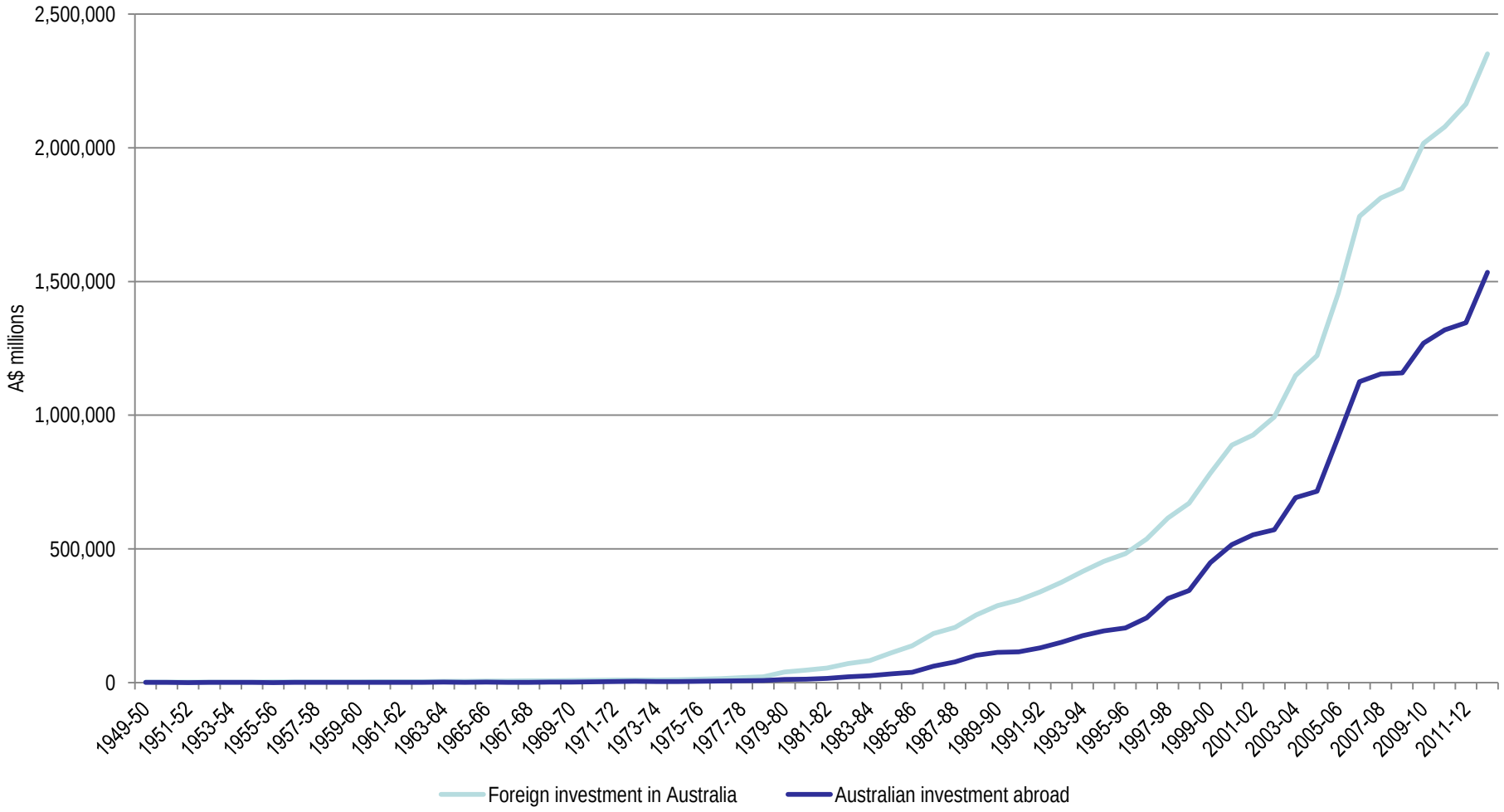
Source: DFAT 2014

Two way trade in merchandise goods as a percent of Australia's GDP 1901-2012-13



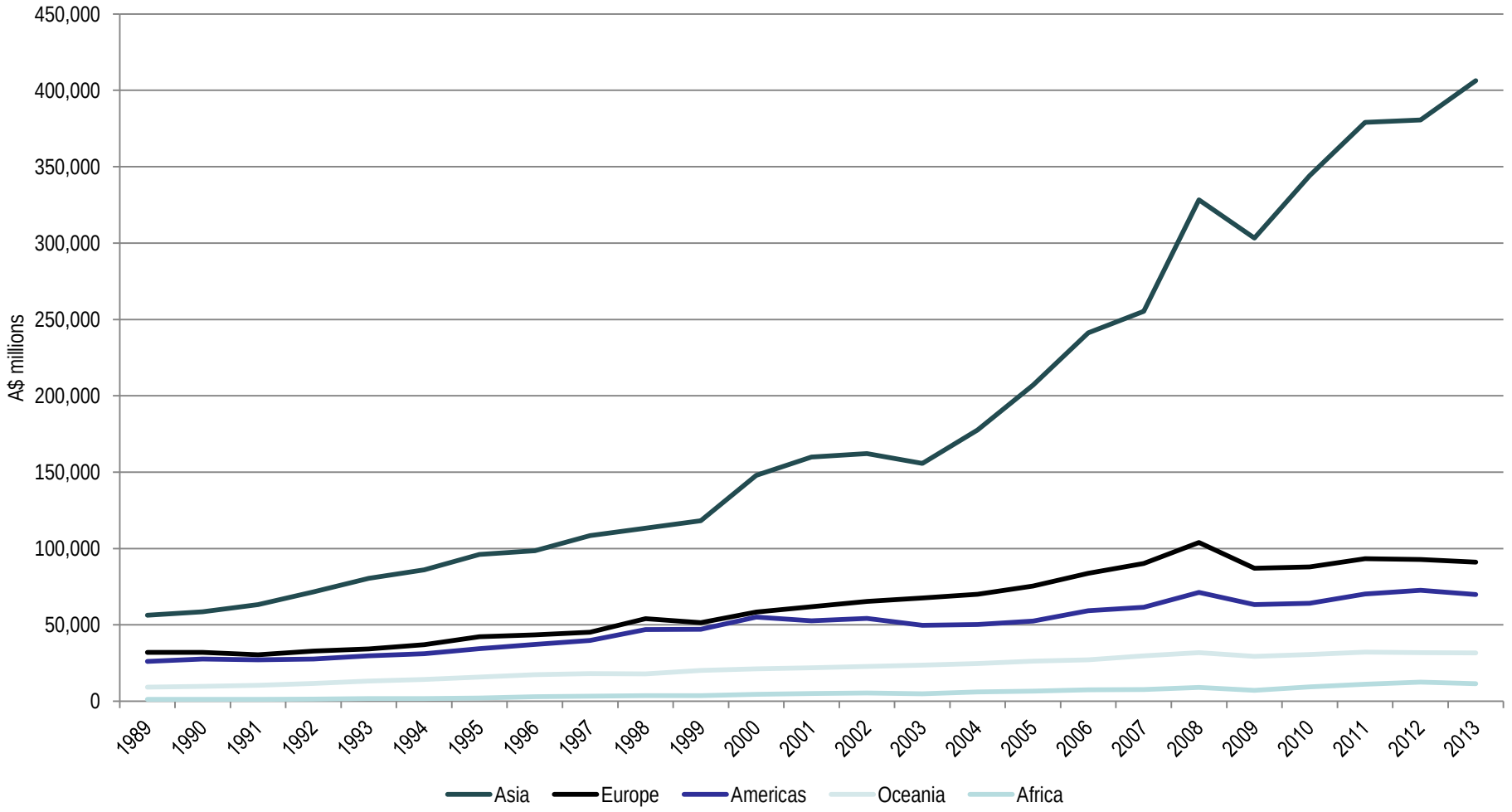
Source: DFAT 2014

Two way foreign investment flow 1949-2012-2013



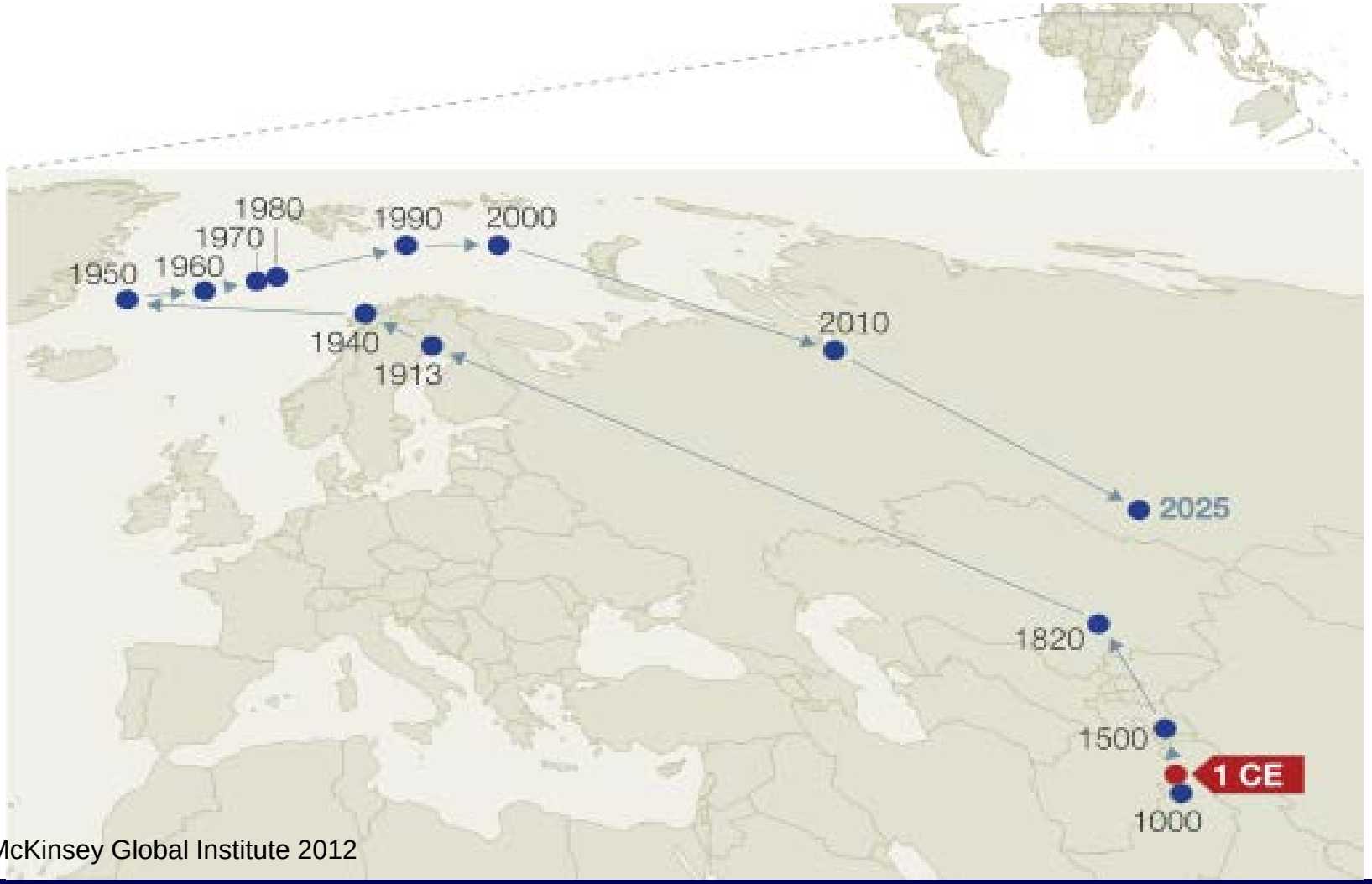
Source: DFAT 2014

Direction of Australia's merchandise goods trade 1989-2013



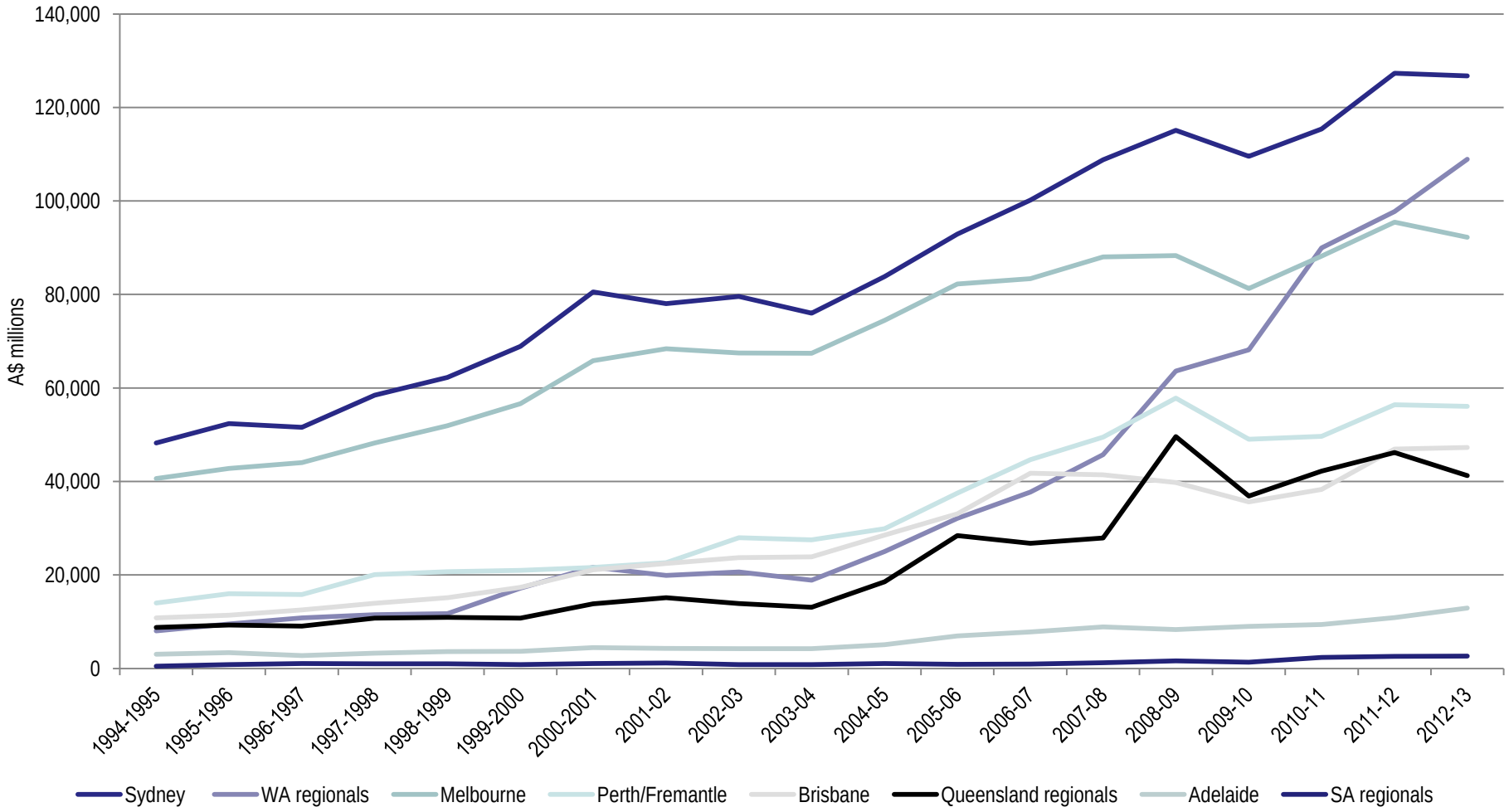
Source: DFAT 2014

Changing centre of gravity of world trade 1 CE to 2025



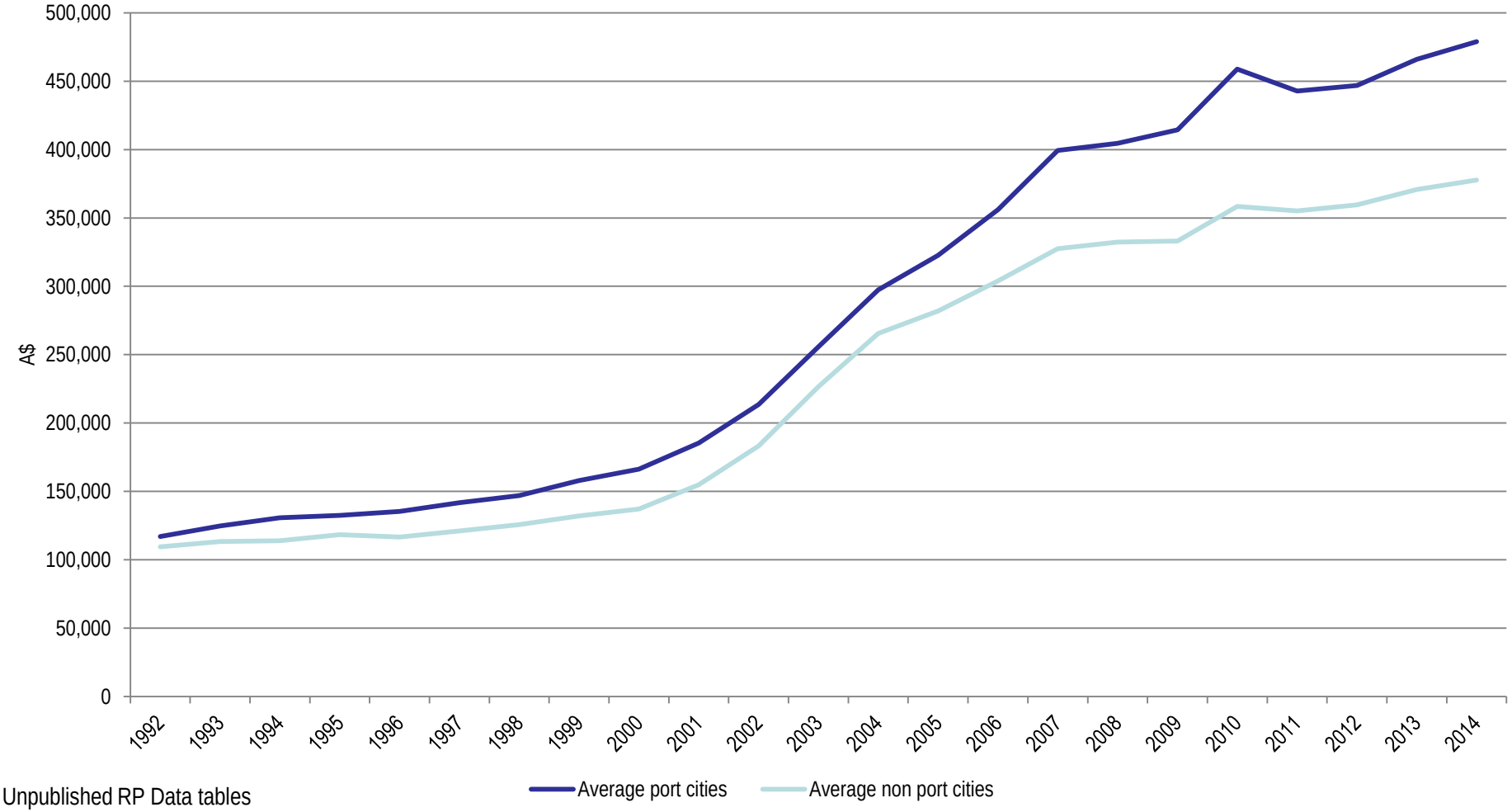
Source: McKinsey Global Institute 2012

Value of international trade flowing through sea and airports 1994-95 to 2012-13



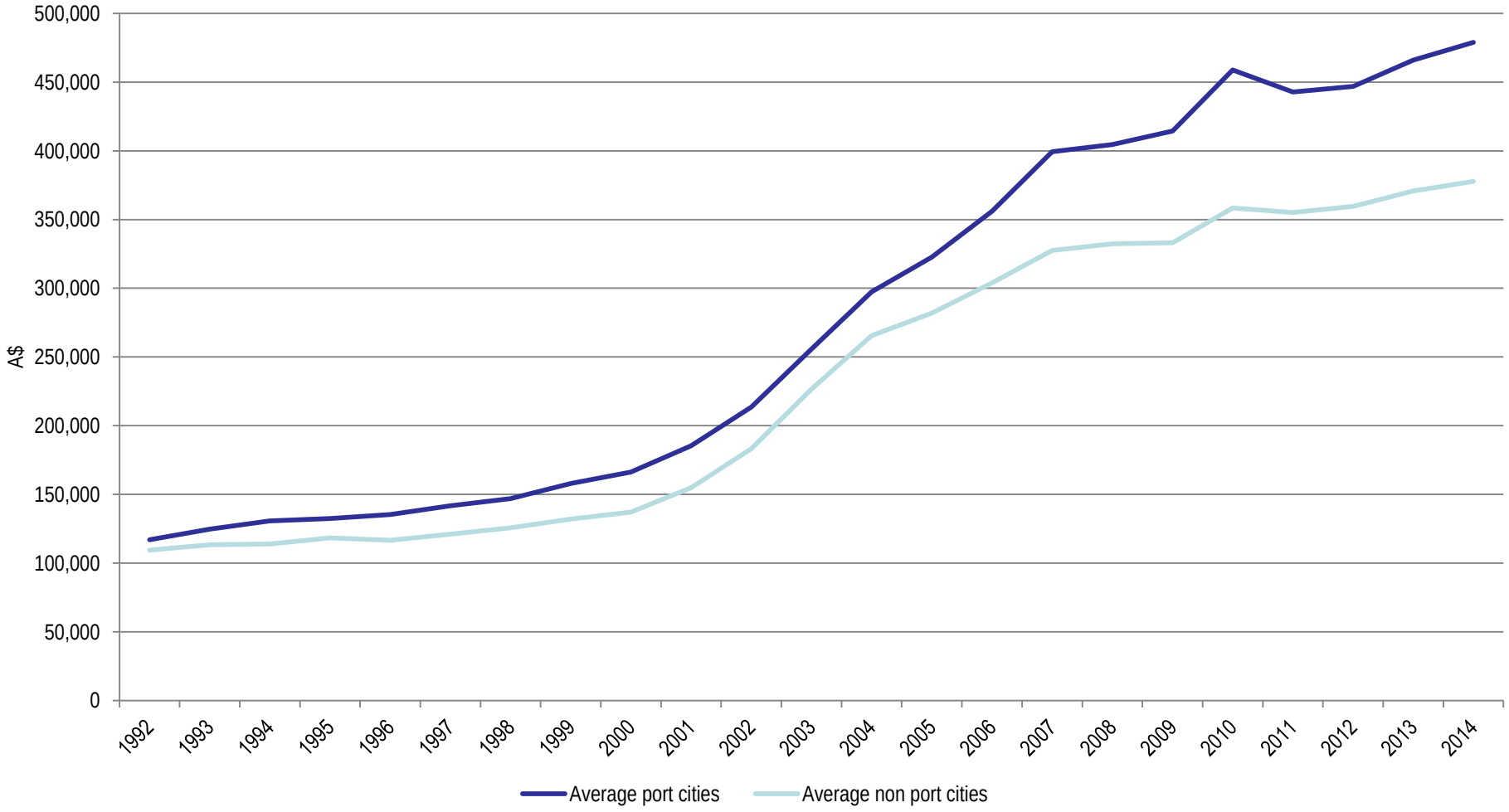
ABS unpublished data

Average nominal house prices in Australian port cities and non port cities



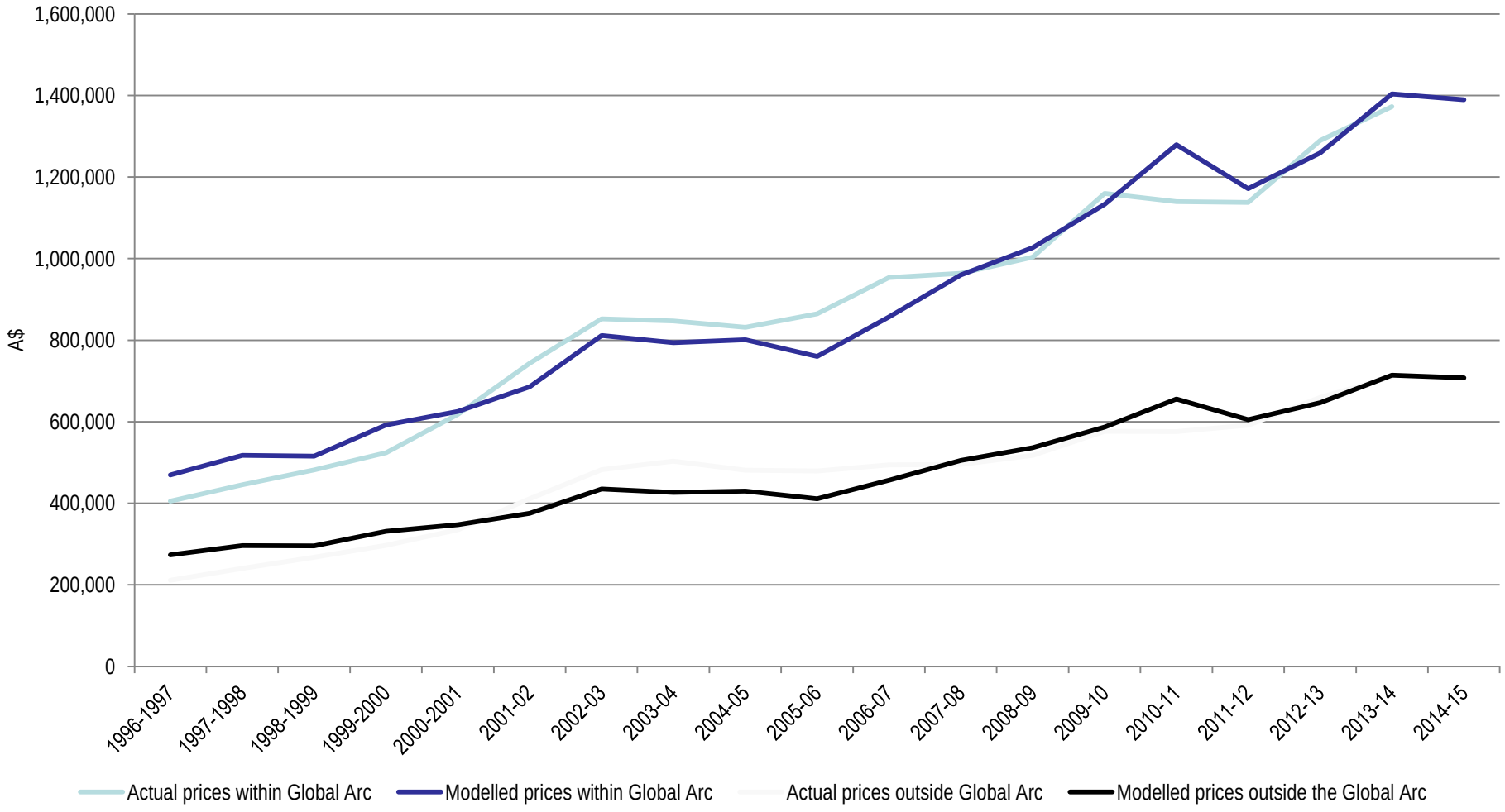
Unpublished RP Data tables

Average nominal house prices in north and west Australia compared to the south central and southeast (excluding metropolitan) 1992-2014



Source: Unpublished RP Data tables

Relationship between modelled and actual house values inside and outside Sydney's Global Arc 1996-97 to 2014-15



Regression outputs for Sydney

Sydney inside Global Arc	
Multiple R	0.971092961
R Square	0.943021538
Adjusted R Square	0.939222974
Standard Error	66670.06204
Observations	17

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	1.10348E+12	1.10348E+12	248.2573711	9.67608E-11
Residual	15	66673457584	4444897172		
Total	16	1.17015E+12			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-50336.72639	58703.47347	-0.857474412	0.404675285	-175460.2182	74786.76546
International trade	10.03257142	0.636738609	15.75618517	9.67608E-11	8.675395203	11.38974764

Sydney outside Global Arc	
Multiple R	0.949038362
R Square	0.900673812
Adjusted R Square	0.894465926
Standard Error	46413.59971
Observations	18

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	3.12546E+11	3.12546E+11	145.0854134	1.94849E-09
Residual	16	34467555811	2154222238		
Total	17	3.47014E+11			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	28564.45503	37672.06302	0.758239734	0.459331289	-51296.75099	108425.661
International trade	4.732286434	0.3928793	12.04514066	1.94849E-09	3.899419523	5.565153344

Take home message 1

Cities exist for trade and are in turn shaped by trade.

- The value of a city, and by extension its house prices, is determined to a large extent by its importance as a node in the trading network. The network is continually moving and consequently, the relative value of cities rise and fall.
- Location, location, location. Where a city (or region) in the network is located is critical.
- Infrastructure, infrastructure, infrastructure. Location means nothing without the right infrastructure.

Take home message 2

As international trade rises as a proportion of Australia's economy, the value of location will continually diverge. This is because the flows of economic value are concentrated in smaller and smaller areas. What are the implications?

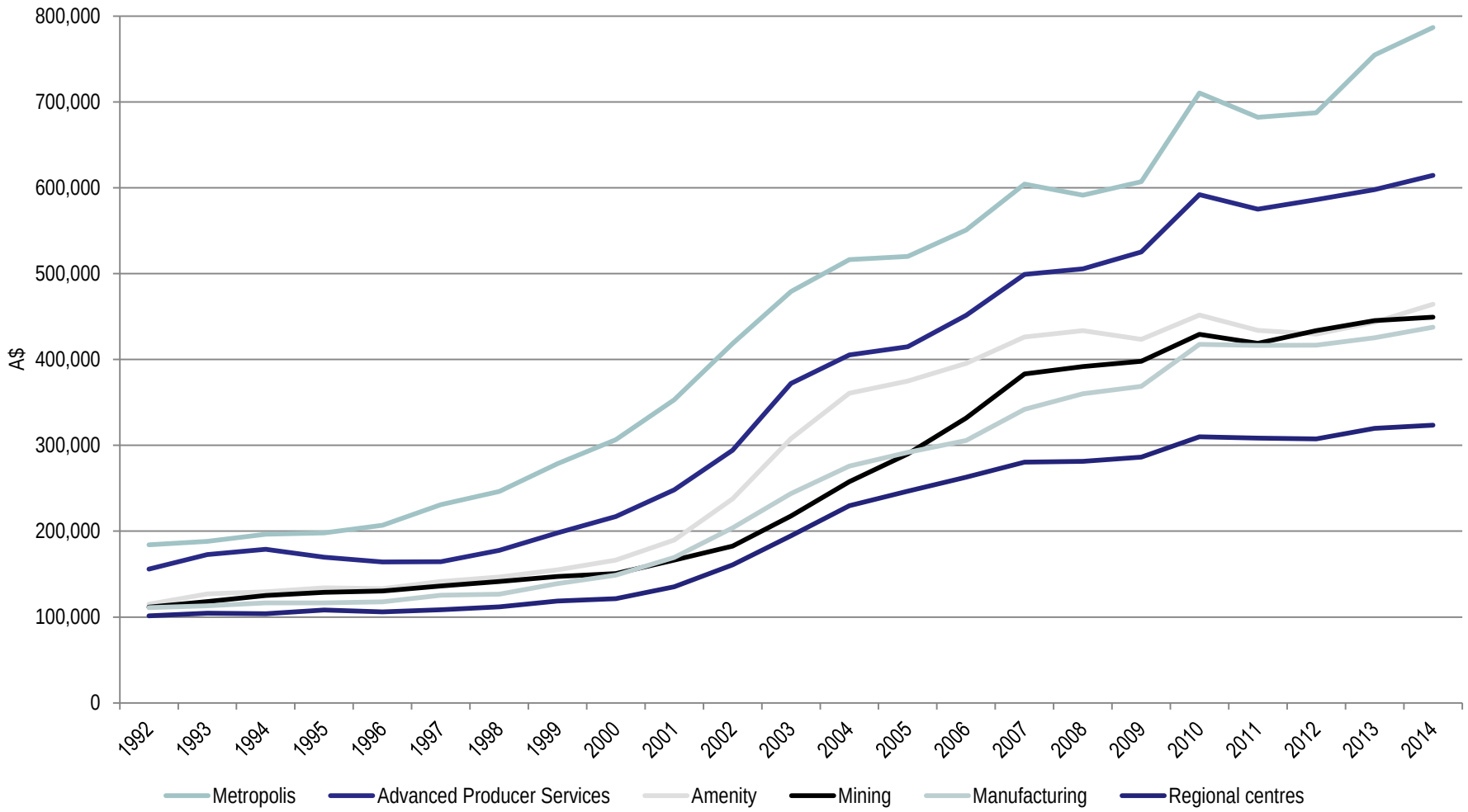
- If people are not connected to the places where economic value is flowing, there are immense consequences for social equity.
- There are also major consequences for labour mobility and national productivity.

Take home message 3

Cities need three things to harvest value from international trade; a Central Business District with a critical mass of multinationals, an airport and a sea port in a close functional relationship.

- If a city has only one or only two, its potential to grow in value as a node is severely reduced.
- The *value* of the link between the three is very high.
- Transport inefficiencies in the triangle degrade the national network disproportionately.

Nominal house prices in Australia by city group 1992-2014



Source: Unpublished RP Data tables