# Impacts of Foreign Direct Investment on Economic Growth: Empirical Evidence from Australian Economy

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#### **Abstract**

This paper examines foreign direct investment (FDI) inflows and its impact on economic growth in Australia. FDI inflows are considered to be a vital source of economic growth or development for any economy and it plays big role in growth in gross domestic product (GDP), improvement in infrastructure, employment creation, export and trade performance. This paper examines the relationship between FDI and economic growth of Australia through regression analysis between FDI and different measures of economic growth. The multiple regressions is used to derive conclusion on importance of FDI. The results highlight that FDI inflows contribute to the Australian economy including a growth in GDP, export performance and employment. Mining and quarrying has been identified as an attractive sector in which it has contributed to 7% of GDP, a large amount of capital has been invested and employed intensive labor. The result reflects absence of relationship between FDI and economic growth of Australia as two out three variables shows poor relationship with FDI. The findings provide critical information to Australian policy decision makers to make an informed decision with regard to attractive investment sectors and policies in encouraging foreign investors to invest in the country.

**Keywords:** foreign direct investments, productivity, industry sectors, tradeable, non-tradeable sector, gross domestic product, economic impacts, export performance, economic growth

## 1. Introduction

The level of foreign investment in Australia increased \$ 220.5 b (8%) to reach \$3,024.4b for the year ended 31<sup>st</sup> December, 2015 in which portfolio investment accounted for 54%, direct investment 24%, other investment 16% and financial derivatives for 6%. The leading investor countries are USA, UK, Belgium and Japan (ABS Summary Report, 2015). The level of foreign direct investment in Australia rose forms around 15% of GDP to 35% from 1979-80 to 2012-13 and it has achieved higher levels post GFC than any time before the crisis (Australia's Foreign Investment – Historical Review, 2013). Despite of essential contribution of foreign Investment in economic growth and prosperity, the impact of it on economic growth is always questioned. This paper examines FDI inflows to Australia with emphasis on its' contribution to growth of the Australian economy. Australia is considered as attractive investment destination for foreign investors. FDI is important to the host country's economic development. The type of sector influences the inflow of FDI and contributes to indirect and direct effects of the country economy (Australian Government – The Treasury, 2016).

Historically FDI inflows to Australia were lower compared to its present FDI inflows. However, in the last decade, FDI inflows to Australia have been growing steadily since 2001 (ABS Summary Report, 2016). Factors contributed to this growth include Australia-ASEAN free trade agreements, growth in mining, agricultural, political stability, attractive investment policies. FDI inflows has contributed significantly to the host country's economic development such as gross domestic product, raised standard of living through job creation, export performance, improved budget surplus, a source of revenue, and transferring of managerial expertise and technology to the host country. The aim of this research is to analyses impact of FDI that influenced economic growth process in the Australian economy. The analysis should provide an informed decision making for potential investors with an interest in FDI in Australia. The research also provides valuable information to policy makers in developing new policies or revising its country policies towards FDI by attractive investment sectors. The next section provides literature review in the context of FDI and its contributions to economic growth. This is followed by an analysis of data and interpretation of the results by using simple correlation and regression model.

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## 2. Objective & Methodology

The primary objective of this research paper is to analyze impact of FDI on economic growth in Australian economy in recent period. This research examines time series data over a period of thirteen years from 2001 to 2013. (see data set in the Appendix). The objective will be achieved by historical and statistical analysis of FDI and economic growth measures such as GDP, Exports & Employment to total population ratio. The relationship between FDI and economic growth is evaluated and examined by correlation & regression analysis of FDI and economic growth measures. Apart from this, the trend analysis of FDI in tradable and non-tradable sectors is considered for conclusion.

## 3. Research Hypothesis

The literature review reflects a marked difference of opinion among researchers about the impact of FDI on economic growth. Hence, the hypotheses of this paper are:

H1: There is strong positive relationship between FDI & GDP in Australia.

H2: There is strong positive relationship between FDI & Exports in Australia.

H3: There is strong positive relationship between FDI & employment ratio in Australia.

#### 4. Literature Review

According to the International Monetary Fund (IMF), FDI refers to investments made to acquire a lasting interest in enterprises operating outside of the economy of the investor (Ridgeway, 2004). The OECD (2012) says a foreign direct investment enterprise is an enterprise resident in one economy and in which an investor resident in another country owns 10 per cent or more of its voting power.

Modernisation Theory proposes that FDI contributes positively to economic growth in developing countries, particularly because it meets the demand for capital formation (Firebaugh, 1992; Mello, 1999). Romer (1993) says that foreign investment is useful for building physical infrastructure which, in turn, increases the absorptive capacity of the receiving country. Modernisation Theory also claims that FDI transfers knowledge, technologies, managerial skills and ideas, all of which enhance economic growth.

Evidence suggests that there is a strong positive relationship between FDI and economic growth (Mengistu & Adams, 2007), and on employment-creation (Al-Iriani & Al-Shamsi, 2009). Al-Iriani and Al-Shamsi go further, and suggest that FDI is vital for capital formation for developing countries, and for the transfer of knowledge and technology. The growth of the Australian economy reflects strong economic growth, regional free trade agreements, increasing international trade with Asia Pacific region, lower barriers to trade and investment, improvements in business environment, good infrastructure and transportation, political stability, plentiful of both middle to highly skilled workforce, strong record of economic growth, stable governance and regulatory environment, attractive investment incentives by the host country, attractive investment by sectors, and has trade partnerships with European, USA and Asia. The host country's economic growth is perceived as attractive investment location for foreign investors wishing to make capital investment in the country. Australia has a close proximity to a huge market in the Asian region. In addition to FDI impacts on the country, as cited by (Krstevska & Petrovska, 2012), the potential growth of an economy is seen as an incentive borrowing on the international market. This suggests that Australia is increasingly an attractive investment destination and foreign investors that have invested much capital into the country by borrowing funds to make investments.

Rahman (2015) comes to a different conclusion, a conclusion in line with Dependency Theory, which claims that foreign investment has a negative impact on economic development. Rahman finds that, for a particular country – Bangladesh – growth in FDI has not been associated with positive economic growth; and that this may be related to a low absorptive capacity of Bangladesh to absorb capital inflow. Important factors determining the absorptive capacity of an economy include the level of skilled human resources, technology, infrastructure and the political environment. Corruption and lack of transparency tend to discourage foreign investment (Kaufmann & Wei, 1999). Rahman's (2015) findings are in line with Borensztein et al. (1998) and Makki and Somwaru (2004). Rahman (2008) suggests the incidence of natural disasters also decreases the absorptive capacity of an economy. However, Sylwester (2005) and Agosin and Mayer (2000) argue that FDI influences domestic investment positively, which stimulates economic develop of the receiving country; but Fry (1999), and Hermes and Lensink (2003) argue the opposite: that FDI has decreased the rate of national saving and domestic investment and hence economic growth in several developing countries.

FDI provides an important source of capital inflows to the host country. One of FDI benefits is that it brings benefits to a country and contributing to a growth economy, notably increased in gross domestic product and

export revenue for the country, although Krstevska and Petrovska (2012) argue that FDI benefits can be difficult to measure. Apart from the benefits of FDI to developing countries, FDI also positively contribute to growth in countries that require ongoing investments to build its economy and its impacts on the country are huge. FDI benefits the country economic development in export growth, education, building roads, transportation, reduction in poverty, and a positive impact on the country budget surplus. Though Krstevska and Petrovska (2012) pointed out that FDI economic benefits can be difficult to measure due to many factors associated with growth in FDI. In taking into consideration of many factors, the current research analysis looks into the relationships between FDI inflows by sectors and measures of the contributions to economic performance. According to Krstevska and Petrovska (2012), the second approach to analysis of FDI using a qualitative approach related to particular aspects of FDI contributions. However, the overall purpose of inward Australia FDI is FDI positively influenced economic growth to the Australian economy.

Recent literature review looks at theory and measurement issues of FDI, such as issues related to the impact of FDI. Bora (2002) examines policy and analytical issues. This research on FDI inflows in Australia looks at some impacts on FDI to economy using compiled data from the Australian Bureau of Statistics and data are used fundamental statistical analysis of Figures and model. Benacek, Gonicki, Holland, Sass (2000) examines the benefits and drawbacks of surveys and econometric analysis. However, the authors suggested that the findings of econometric studies support survey results.

On the other hand, Jevcak, Setzer, Saurdi (2010) studied FDI inflows in 10 new EU member countries with regard to specific features of the emerging economies and the importance of FDI structure. It was noted that FDI inflows into these countries were related to the country specific factors and the global driving forces were behind this. The results have shown that stronger growth and higher interest rates were related to large capital inflows. However, it was found that capital inflows were directed towards the non-tradable sector. This suggests a low contribution to productivity growth and export potential. Further to this, a large capital inflow can be prone to the economy in the event of a change in the business environment and risk perception. As for econometric analysis, a methodological paper by Benacek, Gronicki, Holland, and Sass (2000) takes into consideration the benefit effects and difficulties of surveys and econometric analysis as sources of information. These sources are used since they are relevant and useful in the conduct of this research.

As for the current research on FDI inflows in Australia, data analysis of FDI inflows by sectors and leading countries, employment and growth can be found in Australian Bureau of Statistics. The list relates to countries that have invested in Australia since 2001, total FDI capital, investment by sectors, the growth of FDI, employment ratio and export.

The well-known dependency theory claims negative impact of FDI on economic development of recipient country (Dutt, 1997). This theory was considerably supported by successor authors because of the huge profit transferred to parent country nation for long run. There are experts believes that FDI can unnecessary overflow investments in the country that makes investment environment overcrowded and that leads to inflation in the interest rate of the recipient country (Eller, Haiss, & Steiner 2005).

This paper implements the econometric analysis and the statistical interpretation approach. The econometric analysis looks into the relationship between inward FDI and GDP as well as export performances. The qualitative analysis covers aspects of FDI contributions to the performances of the economy.

## 5. Theoretical Framework

# 5.1 Foreign Direct Investment

This paper takes FDI as all types of capital & revenue investments from all the countries into Australia that involves establishing operations or acquiring tangible assets, including stakes in other businesses. Majorly FDI classified into nine broad categories that includes

- 1) Foreign investment in Australia
- 2) Direct investment in Australia
- 3) Direct investment in Australia, Equity capital and reinvested earnings
- 4) Direct investment in Australia, Other capital
- 5) Portfolio investment liabilities
- 6) Portfolio investment liabilities, Equity securities
- 7) Portfolio investment liabilities, Debt securities

- 8) Financial derivative liabilities
- 9) Other investment liabilities

These all investments, directly or indirectly are injected in industries of Australian economy. Therefore, it will be indeed appropriate to analyze real impact of fund inflow in economy to get realistic picture.

#### 5.2 Employment Ratio

The employment ratio reflects total employment to total population ratio for particular period. The data is collected from Australian Bureau of Statistics.

#### 5.3 Types of FDI

FDI can be categorized in following five types:

- 1) Greenfield investments
- 2) Mergers & Acquisitions
- 3) Joint Venture
- 4) Horizontal FDI
- 5) Vertical FDI

## 6. FDI in Australia

Capital inflows into host country is perceived as being important for the country economy, in general it has transformed a low growth country economy into a moderate to strong growth economy. Data indicates that FDI inflows in Australia have increased for the period 2001-2015 (ABS 2016 Report). As shown in Figure 1, the total inflows increased steadily from \$120b in 2001 to \$500b in 2006, and to just under \$300b in 2015. The fluctuations in the fall of FDI are due to global financial crisis in 2008. GDP has increased steadily between 2001 and 2015 and it is higher compared to developed countries of USA, Canada, and New Zealand. This suggests that investors are attractive to investing in Australia. Factors contributed to this growth include a huge market size, population growth, stable government, skilled workforce, country economic development, growth of the economy, boosting infrastructure and technology, improvement in laws and regulations. FDI inflows to Australia were stronger in the years 2006 and 2009. As at 31 December 2015, the level of foreign investment in Australia was \$3,034b. It appears that Portfolio investment represents the highest amount with \$1,622.7b (54%), whilst direct investment accounted for \$735.5b (24%). Other investments are account for \$485.6b (16%) and financial derivatives for \$180.6b (6%). Debt securities was \$1,162.3b (38% if foreign investment in Australia). Equity securities were \$460.4b (15% of foreign investment in Australia) (ABS, catalogue no. 5352.0).

Figure 2 shows the level of investment by leading countries for the year ended 31 December 2015. The United States of America has been the leading country accounted for \$860.3b (28%), United Kingdom \$499.9b (17%), Belgium \$238.5b (8%), Japan \$199.6b (7%), Singapore \$98.6b (3%) and Hong Kong (SAR of China) \$85.4b (3%). The financial account for the year ended 31 December 215 shows the leading countries recording high net inflows are United States of America, \$59.9 (31%), Belgium \$22.3b (12%), Japan \$14.4b (8%) according to ABS, Catalogue no. 5352.0.

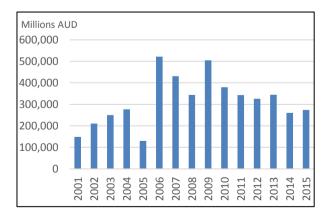


Figure 1. Total FDI, 2001-2015

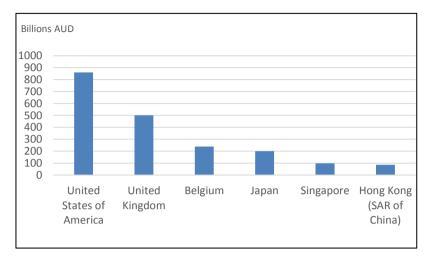


Figure 2. Leading investor countries, 2001-2015

In terms of sectoral distribution by industry, between 2011 and 2013, mining and quarrying represents the leading investment increased from \$40.2m in 2011 to \$51.2m in 2013, before dropping to below \$15.2m in 2015. Wholesale and retail trade; repair of motor vehicles and motor cycles represent the second highest in inward FDI, though investment in this sector fluctuates but has dropped considerably from \$5.3m in 2011 to -\$3.8m in 2015. The transportation and storage have increased steadily from \$575m in 2012 to \$7,069m in 2013 (ABS, Catalogue no.5352.0).

The GDP analysis by sectors show that the mining and quarrying sector received a higher FDI inflows in the tradable sector which contributed to an increasing rate in GDP from 2011 to 2014. Investment in these stocks is crucial in stimulating the economic growth process. In an open economy like Australia, the level of this investment depends on the attractiveness of the traded sector, which is therefore seen as the key to economic expansion. As trade is vital for the economy, growth policies have focused on its open sector, while the role of the non-traded sector is considered of less importance. The non-tradable sector represents a small portion of FDI inflows. Notably the wholesale and retail trade, repair of motor vehicles and motor cycles and electricity, gas utility represents small FDI inflows.

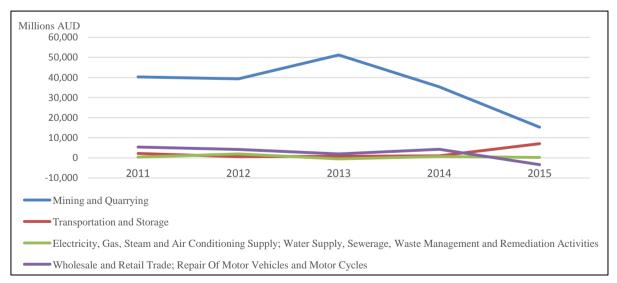


Figure 3. FDI by selected industries, 2011-2015

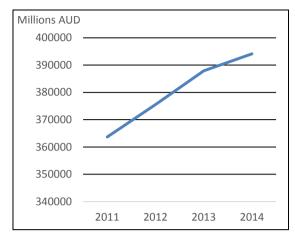


Figure 4. GDP current prices, 2011-2015

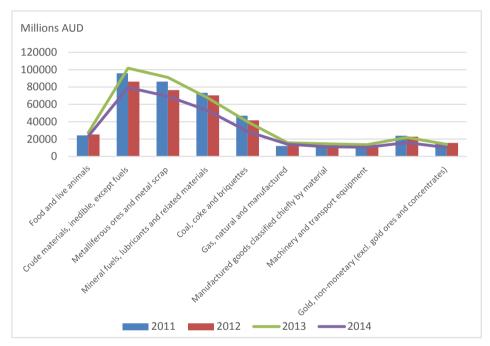


Figure 5. Export by selected industries

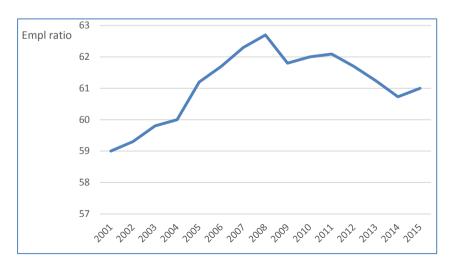


Figure 6. Employment ratio, 2001-2015

It is important to note that when analyzing export by selected industries, Australia's export is dominated by mining and crude materials inedible, except fuels; metalliferous ores and metal scrap; mineral fuels, lubricants and related materials. The highest FDI inflows are crude, followed by metalliferous ores and metal scrap; and material fuels, lubricants and related materials represented the lowest portion of export. It is therefore; suggest that FDI inflows are concentrated in the crude materials industry.

The employment ratio analyses the employment in the sectors where FDI inflows have increased. Employment ratio increased sharply from 59 in 2001 to 62.3 in 2007. Positive trend is present in 2008 accounted for 62.7 before dropping to 61 in 2015. Data on individual sector per FDI is not available; therefore, data in Figures 3 and 6 are used based on FDI by industry sector. The mining industry represents Australia's largest foreign investment which employed a high number of workers. Mining is a significantly labor intensive industry which contributed to about 7% of GDP to the Australian economy. Different ores and minerals are mined throughout the country. In essence Australia is one of the world's largest producers of mineral products, including zinc, coal, gold, copper, iron, mineral sands.

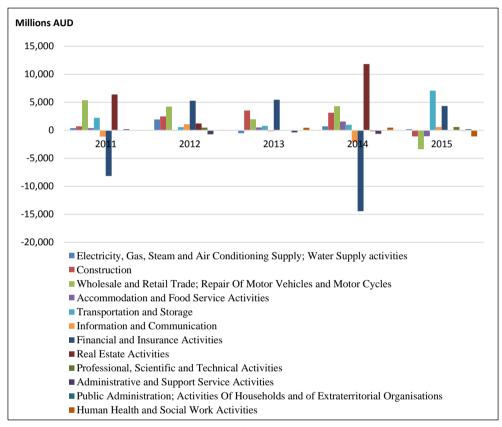


Figure 7. Productivity in tradeable industry sector

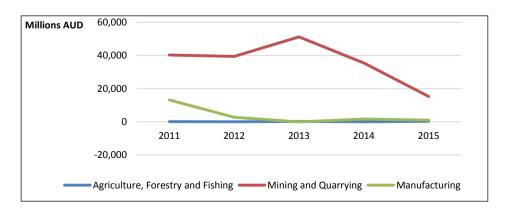


Figure 8. Productivity in tr adeable industry sector

The FDI inflows analysis illustrates that the overall tradable industry was higher compared to the non-tradeable sector. The large amount suggests that the mining and quarrying sector represents the largest industrial export sector which contributes to the rise in GDP than the non-tradeable sector. A small portion of tradeable industry is agricultural, forestry and fishing industry and manufacturing which suggest a low employment ratio though also contributed to low amount of export revenue. In the non-tradeable sector, construction contributes to average growth in this sector. The average growth could be related to the growth in migration, technology adoption, and construction boom across Australia states. The construction sector takes into consideration a high employment rate resulting from a strong construction boom and productivity growth in the sector. The non-tradeable sector represents the lower capital investments in domestic economy which suggest a low productivity, low employment ratio and non-intensive labor.

It is important to note that whilst crude materials and metalliferous ores and metal scrap represent a good proportion of export products, however, mineral fuels, lubricants and related materials also contribute to productivity growth. The largest FDI inflows concentrated in the mining and quarrying sector.

Crude materials, inedible, except fuels	Metalliferous ores and metal scrap	Mineral fuels, lubricants and related materials
95783	86221	73394
86233	76571	70344
101759	91067	67513
79424	69252	52770

#### 7. Statistical Interpretations

The relationship between FDI & GDP growth rate, FDI & Employment and FDI & exports are analyzed based on time series data from the year 2001 to 2013.

## 7.1 FDI and GDP Growth

The moderate correlation, 0.51 is noticed between FDI and GDP for economy in absence of linear relationship which was proved by relatively higher  $R^2$  value 0.16 and P value 0.12. Thus it reflects no direct or linear relation between FDI and GDP. This indicates there are other factors like strength of domestic economy have huge impact on GDP growth. Therefore, hypothesis 1 fails to be accepted.

# 7.2 FDI and Employment Ratio

The considerable correlation 0.67 observed between FDI and employment to total population ratio. The value of  $\mathbb{R}^2$  and P value found relatively big 0.35 and 0.04 respectively. This reflects strong relationship between FDI and employment to total population ratio. But as GDP has moderate relationship with FDI, the relationship of employment could be largely depending on other factors than FDI. Therefore, hypothesis 2 can be accepted.

# 7.3 FDI and Export

The relative low correlation 0.45 observed between FDI and export. The value of R<sup>2</sup> and P value found 0.21 and 0.11 respectively that indicates highly autonomous variables having sporadic relationship between FDI & exports. Therefore, hypothesis 3 fails to be accepted.

Thus, two out of three measures of economic growth shows poor relationship with FDI that indicates absence of direct effect of FDI on economic measures on Australian economy.

# 8. Conclusion

This paper examines economic impacts of FDI inflows on the Australian economy. The economic impacts of FDI are estimated based on regression method and qualitative approach to interpretation of data. It is found that two out three economic measures cannot identify the direct relationship with FDI. Therefore, the hypothesis 1 & 3 failed to be accepted and hypothesis 2 is accepted. Because the correlation between FDI & GDP derived at 0.51 and  $R^2$  value found 0.16. FDI and Employment ratio found correlation 0.67 &  $R^2$  value derived at 0.35. The correlation &  $R^2$  between FDI & Exports are derived at 0.45 & 0.21 respectively.

The analysis examines the attractiveness by sectors that have contributed to the country economic development. It was found that the investment by sectors in particular the growth rate of mining and quarrying influenced FDI in Australia and the economic performance of the economy. The empirical analysis found that overall capital inflows were significant for the country economic development. The FDI inflows to Australia were higher from its major trading partners, the United States of America and United Kingdom compared to Japan, Singapore, Hong Kong

and Belgium. The increased in FDI inflows resulting from historical ties with the U.S.A and the United Kingdom. The FDI inflows have contributed significantly to the country's growth economy, including GDP, positive budget surplus, export performance, employment creation, generate revenue for the host country government as well as income generated for local businesses and people. Other benefits of FDI for Australia include inward technological, managerial expertise and know how, export products derived from investments in the host country.

The initial conclusion can be derived that all FDI may be playing important role in economic development for developing economies but it is questionable for developed economy like Australia. The government could be selective for choosing FDI. The FDI that increases exports or reduce imports can be welcomed and can be avoided rest of the flow.

## 9. Recommendations for Future Research

The result of this study can give useful direction to further analysis of the role of FDI in economic growth in Australia. It is hope that the statistical analysis provides useful information to current, potential investors and policy makers of both Australian and host country governments in attracting FDI. Export performance is an indication of a country's ability to attract FDI into the country. The proven and widely used models like Cobb — Douglass model can give further insight on relationship between FDI and economic growth. This research paper also motives to conduct sector wise micro analysis for industries that attract FDI in Australia.

#### References

- Agosin, M., & Mayer, R. (2000). Foreign direct investment: Does it crowd domestic investment? UN Conference on Trade and Development Working Paper 146, Geneva.
- Alfaro, L. (2003). Foreign Direct Investment and Growth: Does the sector Matter? Harvard University, Harvard Business School, Working Paper.
- Australian Bureau of Statistics. (2016). *Catalogues no. 5352.0, 5206.0, 5368.0, 6202*. Australian Government Department of Foreign Affairs and Trade Bulletin June, 2016. https://doi.org/10.1787/9789264185722-table6-en
- Balasubramanyam, V., Slisu, M., & Sapsford, D. (1996). FDI and Growth in EP and IS Countries. *The Economic Journal*, 107(445), 1770-1776.
- Benacek, V., Gronicki, M., Holland, D., & Sass, M. (2000). The Determinants and Impact of Foreign Direct Investment in Central and Eastern Europe: A comparison of survey and econometric evidence. *Journal of United Nations*, 9(3).
- Bora, B. (2002). Foreign Direct Investment Research issues. Routledge, Taylor and Francis Group, London and New York. https://doi.org/10.4324/9780203469699
- Choe, J. I. (2003). Do Foreign Direct Investment and Gross Domestic promote Economic Growth? *Review of Development Economies*. https://doi.org/10.1111/1467-9361.00174
- Chris, W., & John, S. (2016). Foreign Investment and Residential Property Price Growth. *Treasury working Paper* 2, Australian Government The Treasury.
- Drysdale, P. (2011). The Australia USFree Trade Agreement: An Assessment. *Pacifice Economic Paper No 345*, Australia Japan Research Center.
- Financial Services Institute of Australia. (2016). A discussion paper on Regulating Foreign Direct Investment in Australia.
- Firebaugh, G. (1992). Growth Effects of Foreign and Domestic Investment. *American Journal of Sociology*, 105-130. https://doi.org/10.1086/229970
- Fry, M. (1999). Some lessons for South Asia from developing country experience with foreign direct investment. The World Bank, Washington.
- Gali, J., & Taplin, B. (2012). The macroeconomic effects of lower capital inflow. Economic Roundup, 3.
- Hermes, N., & Lensink, R. (2003). Foreign direct investment, financial development and economic growth. *Journal of Devgelopment Studies*, 40(1), 142-153. https://doi.org/10.1080/00220380412331293707
- Hunya, G., Holzner, M., & Wörz, J. (2003). *How to assess the impact of FDI on an economy.* Vienna Institute for International Economic Studies.
- Jevcak, A., Setzer, R., & Suardi, M. (2010). *Determinants of capital flows to the new EU member states before and during the financial crisis*. European Commission, Economic Papers.

- Kaufmann, D., & Wei, S. (1999). *Does grease money speed up the wheels of commerce?* World Bank Working Paper series 2254, Washington.
- Krstevska, A., & Petrovska, M. (2012). The economic impacts of the foreign direct investments: Panel estimation by sectors on the case of Macedonian economy. *Journal of Central Banking Theory and Practice*, 55-73.
- Lall, S. (2000). FDI and Development: Policy and Research Issues in the Emerging Context. Working Paper Number 43, Queen Elizabeth House, University of Oxford.
- Mello, D. L. R. (1999). Foreign direct investment-led growth. *Oxford Economic Papers*, 51(1), 133-151. https://doi.org/10.1093/oep/51.1.133
- Mengistu, B., & Adams, S. (2007). Foreign Direct Investment, governance and economic development in developing countries. *The Journal of Social, Political and Economic Studies*, 32(2), 223.
- Neuhaus, M. (2006). *The Impact of FDI on Economic Growth, An Analysis for the Transition Countries of Central and Eastern Europe*. Physica-Verlag, A Springer Company.
- OECD. (2012). *Glossary of foreign direct investment terms and definitions*. Retrieved from http://www.oecd.org/investment/investmentfordevelopment/2487495.pdf
- OECD. (2017). Economic survey Australia. https://doi.org/10.1787/eco\_surveys-aus-2017-en
- Ridgeway, A. (2004). Definition of foreign direct investment (FDI) terms. Issues paper 20, Statistic Canada
- Romer, P. (1993). Idea gaps and object gaps in economic development. *Journal of Monetary Economics*, 32(3), 543-573. https://doi.org/10.1016/0304-3932(93)90029-F
- Sylwester, K. (2005). Foreign direct investment, growth, and income inequality in less developed countries. *International Review of Applied Economics*, 19(3), 289. https://doi.org/10.1080/02692170500119748
- Yu, N., Yonghong, T., & Tan, X. (2011). Technology Spillovers from FDI: The Case of ASEAN (December 8, 2011).

Appendix 1
The statistical data for Total Foreign Investment in Australia

Year	Foreign investment in Australia	Direct investment in Australia	1 7 1	Direct investment in Australia, Other capital	Portfolio investment liabilities	Portfolio investment liabilities, Equity securities	Portfolio investment liabilities, Debt securities	Financial derivative liabilities	Other investment liabilities	Total FDI
2001	50,911	15,129	20,970	-5,842	31,999	14,406	17,594	-2,416	6,199	148,950
2002	76,052	26,221	10,590	15,631	32,267	803	31,463	-4,806	22,369	210,590
2003	83,358	9,774	11,916	-2,143	73,490	18,292	55,198	-11,941	12,036	249,980
2004	82,710	53,862	46,851	7,011	57,279	-32,377	89,656	-26,112	-2,319	276,561
2005	42,374	-37,050	-41,110	4,059	82,342	12,825	69,517	-20,037	17,120	130,040
2006	173,188	34,944	19,186	15,758	140,116	18,528	121,588	-12,686	10,814	521,436
2007	152,479	49,571	34,837	14,734	76,275	17,560	58,715	-10,510	37,143	430,804
2008	131,786	55,909	32,192	23,717	24,483	24,952	-469	-4,036	55,429	343,963
2009	140,502	40,603	38,149	2,454	183,042	45,932	137,109	-56,463	-26,679	504,649
2010	106,153	39,729	37,634	2,095	127,612	13,520	114,092	-29,209	-31,978	379,648
2011	101,896	57,110	46,076	11,034	81,788	1,103	80,686	-50,985	13,983	342,691
2012	105,567	56,964	32,001	24,962	58,009	13,544	44,465	-44,420	35,014	326,106
2013	100,044	59,019	27,794	31,225	85,636	15,922	69,715	-66,054	21,442	344,743

Appendix 2

The statistical data for FDI & Economic growth measures for Australia

Total FDI	Employment to population ratio	GDP (m)	Exports (m)
148,950	59.0	728225	122531
210,590	59.3	780294	119458
249,980	59.8	828603	107956
276,561	60.0	892252	117773
130,040	61.2	962311	139080
521,436	61.7	1038372	163753
430,804	62.3	1132501	168386
343,963	62.7	1235757	222341
504,649	61.8	1257165	196556
379,648	62.0	1357842	231143
342,691	62.1	1454730	261697
326,106	61.7	1502213	247749
344,743	61.2	1551643	261958

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