

AT2 - Project: Report

Economic Project

Microeconomics – Macroeconomics – Data Analysis

Topic: Should the Government consider increasing their subsidies for international higher education in Australia?

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Should the Government consider increasing their subsidies for international higher education in Australia?

INTRODUCTION

This economic project focuses on determining whether the Government should consider increasing their subsidies for Higher Education in Australia, in regards to both domestic and international students. The Education System within Australia is seen as one of the most regarded globally, having 1.5 million students throughout all Australian Universities in 2017.¹ Higher education is vital for career development in many industries where the qualifications received through university are seen as essential in receiving employment.² While studying, students are able to develop their research ability and discover technological advancements to have a leg up in entrepreneurialism.³ Approximately AU\$140 billion was brought into the Australian economy in 2014 due to the activities taking place at the universities.⁴ This was through employment of 130,000 full time careers being offered and development of skills acquired through their education into the workforce.⁵ Saying this, the international students entering the 'excellent' programs have become Australia's fourth largest export contributing AU\$33 billion to the economy.⁶ However, Humanitarian Organisations have raised concern regarding the university's ability to charge large amounts of education fees to international students with up to 400% more than Australians.⁷ Currently, international students are not offered any financial aid from the Government and must pay full amounts.⁸ Domestic students are eligible for Commonwealth Supported Places (CSPs), where the Government subsidises a portion of their university fees, the amounts being measured by the Government with different sectors receiving different subsidisation.⁹ Unfortunately, this contribution is only available for some courses and many individuals remain unable to afford a Higher Education.

CONTEXT

According to the Australian Bureau of Statistics (ABS), the 10 years between 2006 and 2016, the levels of completion of Higher Education increased by 45.9%.¹⁰ People began to acknowledge the importance of attaining qualifications for their individual and career development. Universities maintain a high focus on evolving individuals to become critical thinkers who are actively involved in their weekly tutors and lecturers.¹¹ To prepare students for a career, universities provide a range of different assessment types to display variance through tests and exams for expression of knowledge, and group assignments for communication advancements.¹² Developing these traits becomes important when employers search for employees, hence, people will continue to attend Higher Education industries to secure their employment.¹³ In an economy,

¹ Jackson, C 2019, *Universities Australia DATA SNAPSHOT*, Universities Australia, pdf, viewed 2 July 2021, <<https://www.universitiesaustralia.edu.au/wp-content/uploads/2019/06/Data-snapshot-2019-FINAL.pdf>>.

² *The benefits of university education* 2021, Monash University, viewed 2 July 2021, <<https://www.monash.edu/study/why-choose-monash/information-for-parents/the-benefits-of-university-education>>.

³ I bid

⁴ Jackson, C. Op cit

⁵ I bid

⁶ I bid

⁷ Osborne, P 2015, *Why are international students charged such high fees in Australia?*, viewed 4 July 2021, <<https://www.abc.net.au/radionational/programs/ockhamsrazor/why-are-international-students-charged-high-fees/6908188>>.

⁸ *StudyAssist* 2021, Australian Government, Non-Australian Citizens, viewed 4 July 2021, <<https://www.studyassist.gov.au/help-loans/non-australian-citizens>>.

⁹ *StudyAssist* 2021, Australian Government, Commonwealth Supported Places, viewed 4 July 2021, <<https://www.studyassist.gov.au/help-loans/commonwealth-supported-places-csps>>.

¹⁰ *Australians pursuing higher education in record numbers* 2017, Australian Bureau of Statistics, viewed 3 August 2021, <<https://www.abs.gov.au/AUSSTATS/abs@.nsf/mediareleasesbyReleaseDate/1533FE5A8541D66CCA2581BF00362D1D>>.

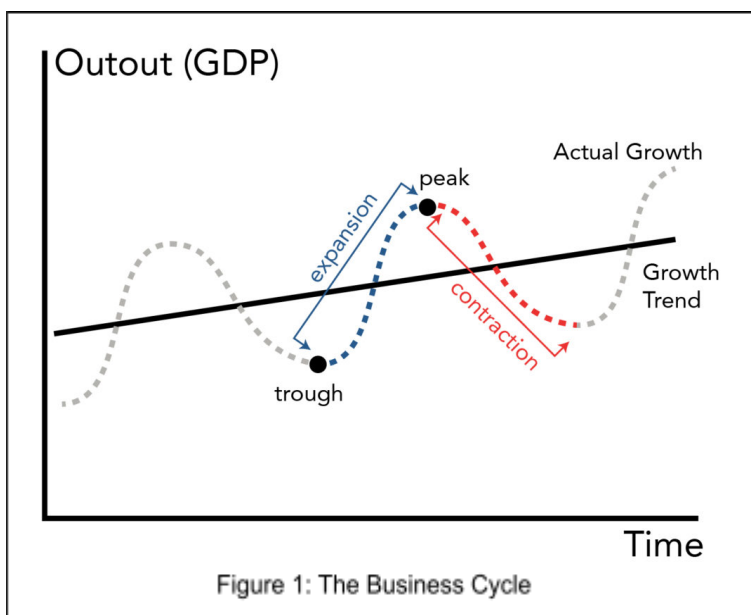
¹¹ *The University of Adelaide* 2021, viewed 3 August 2021, <<https://www.adelaide.edu.au/>>.

¹² I bid

¹³ Hayes, A 2021, *Skilled Labor*, viewed 7 August 2021, <<https://www.investopedia.com/terms/s/skilled-labor.asp>>.

there is a want for a skilled labour force, referring to people who have specialisations in a job through training and experience to perform complex physical or mental careers often associated with higher wages.¹⁴ For many industries, a skilled worker is determined as one with higher qualifications through a University Degree. When an economy has a skilled workforce the competition of tasks becomes efficient and productivity is maximised allowing firms to begin to improve their profits and expand their company.¹⁵ Due to these benefits, firms search for skilled workers to employ, therefore, when there is a rise in skilled labour the unemployment rate is likely to decrease as the number of people being offered jobs increases.

The unemployment rate is an economic indicator regarding the conditions of the labour force, based on demand for labour by firms and supply of labour through households to determine the current performance of the economy, with labour being an economic resource.¹⁶ According to the RBA it is measured by 'the percentage of people in the labour force who are unemployed,' where the labour force is determined as anyone employed or searching for employment.¹⁷ This lagging indicator can be reflected on the business cycle where cyclical expansions and contractions of economic activity are observed (Figure 1).¹⁸ Alex StJohn from universities Australia referred to the employment changes due to Higher Education, whereby it is not only skilled workers being employed. There is an increase in external careers such as public transportation services used, the cleaners of the institutions, and the many opportunities within the universities, such as lecturers and administration, see an increased demand for workers.¹⁹ This correlation saw 25,000 new jobs and a AU\$4.8 billion increase in wages earned by individuals without a university degree in 2017.²⁰ Hence, as the unemployment rate decreases the economy begins to expand towards a peak, where maximum economic activity takes place. This is due to the multiplier effect whereby more people begin earning disposable income, which is injected into the economy through consumption of goods, conversely increasing the Gross Domestic Product (GDP) (Figure 2).²¹



$$GDP = C + I + G + (X - M)$$

In other Words

$$GDP = \text{Consumption} + \text{Investment} + \text{Government Spending} + (\text{Exports} - \text{Imports})$$

Figure 2: GDP Formula

¹⁴ I bid

¹⁵ Hayes, A. Op cit

¹⁶ *Unemployment: Its Measurement and Types* n.d., Reserve Bank of Australia, viewed 7 August 2021, <<https://www.rba.gov.au/education/resources/explainers/unemployment-its-measurement-and-types.html>>.

¹⁷ I bid

¹⁸ *Stages of the Economy* n.d., Lumen, viewed 7 August 2021,

<<https://courses.lumenlearning.com/wm-introductiontobusiness/chapter/new-reading-economic-stages/>>.

¹⁹ Cadence Economics 2016, *THE GRADUATE EFFECT: HIGHER EDUCATION SPILLOVERS TO THE AUSTRALIAN WORKFORCE*, REPORT, Universities Australia.

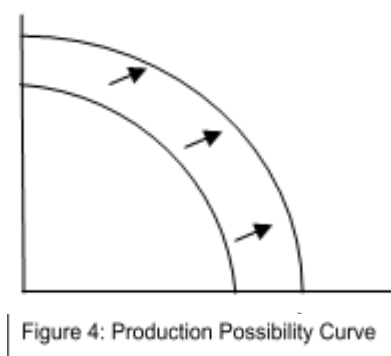
²⁰ Jackson, C. Op Cit

²¹ Ganti, A 2021, *Multiplier Effect*, viewed 7 August 2021, <<https://www.investopedia.com/terms/m/multipliereffect.asp>>.

As part of the GDP formula, as the exports increase, economic growth will occur. Through this, the international students coming from over 150 countries globally are classified as an export. Australia provides the service of education globally as Australia's fourth-largest export (Figure 3).²² International Students have direct contribution through their expenditure on Australian goods and services. This creates a flow on effect as their consumption leads to increased income for workers which is followed with more spending by these workers and continuously repeated. Jana Bowden from Macquarie Business School explored the economic inputs through international students in 2015 with an approximate input of AU\$16.9 billion.²³ However, the COVID-19 pandemic has hindered international education, which has led to a significant decrease in exports and has highlighted the importance of it on Australia's economic growth. In 2021, there is an expectation of Australia to lose up to AU\$18 billion as a result of the decline in international students from 91,250 in January 2020 to 360 arriving during January 2021, which has resulted in a cut of numerous job opportunities.²⁴ This expected loss indicates that the export of international education has a notable impact on the economic growth of Australia and will contribute to an expansion of the economy.



In a similar way, as the workforce is increased the production possibility curve may shift outwards as efficiency and labour resource is increased (Figure 4).²⁵ If applied appropriately, as more people gain specific knowledge and skills, the productivity of the economy is increased.²⁶ This is evident as labour productivity is related to available resources, hence, a rise expands the possible production. With this shift there is expansion of the economy relating to economic growth.²⁷ It is vital to have economic growth as it reflects the living conditions of the economy and improves important aspects; such as, employment and research and development.²⁸



²² *The value of international education to Australia 2015*, Australian Government, pdf, viewed 15 August 2021, <<https://internationaleducation.gov.au/research/research-papers/Documents/ValueInternationalEd.pdf>>.

²³ *The value of international education to Australia*. Op cit

²⁴ Tomazin, F 2021, *International student losses set to punch \$18 billion hole in economy*, viewed 15 August 2021, <<https://www.theage.com.au/national/international-student-losses-set-to-punch-18-billion-hole-in-economy-20210403-p57ga7.html>>.

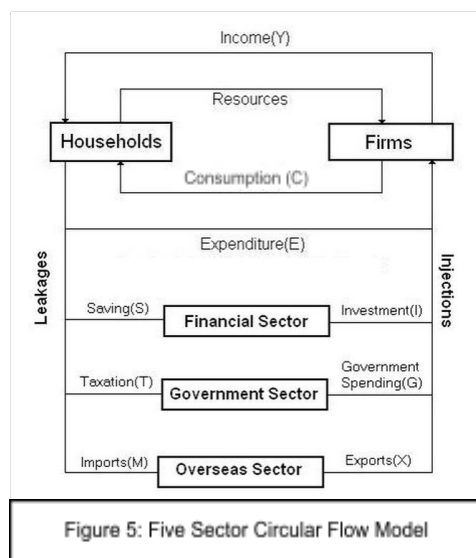
²⁵ *The Production Possibilities Frontier* n.d., Khan Academy, viewed 17 September 2021, <<https://www.khanacademy.org/economics-finance-domain/microeconomics/basic-economic-concepts-gen-micro/production-possibilities/a/the-production-possibilities-frontier-and-social-choices-cn2>>.

²⁶ Nash, J 2021, *Shifts in the Production Possibilities Curve*, viewed 14 September 2021, <<https://study.com/academy/lesson/shifts-in-the-production-possibilities-curve.html>>.

²⁷ I bid

²⁸ Roser, M 2021, *What is economic growth? And why is it so important?*, viewed 14 September 2021, <<https://ourworldindata.org/what-is-economic-growth>>.

The role of exports extends to the 5 sector circular flow model as an injection to the economy demonstrated in Figure 5.²⁹ As exports occur, firms are receiving more profit and allowing incomes to rise and increasing domestic consumption where the multiplier effect takes place. However, due to the fall of unemployment there will be a rise in leakages as households begin to earn higher income. With households holding more money there is a likely increase in savings, income taxation and potentially imports depending on the global economy.



Within the 2020/21 Federal budget there was an allocation of AU\$53.5 million to Higher Education institutions to allow international education providers fee relief due to their losses of COVID-19.³⁰ There is an additional specific learning grant of AU\$30,000 to the institutions per PhD research graduate undertaking an industry internship to encourage employment opportunities and industry-based learning.³¹ StJohn advised the Government's initiative, CSP, for students set in place during 2007, introduced to aid fee payment by students of Higher Education. The subsidy covers a partial amount of the fees, whereby students pay the remainder determined by complexity of the course, however, allowing those worse off to afford a tertiary education.³² The payment is directed directly towards the institutions per domestic student application. Within the CSP, the Government additionally offers a loan arrangement named HECS-HELP which is a system which tuition is paid for up to AU\$108,232 in 2021, being repaid as a career is obtained and a prescribed salary is earned, currently at AU\$47,014 per year.³³ Although the CSP is only supplied to Australian citizens or permanent visa holders, international students are therefore required to pay full tuition fees, which hinders the demand for Australian Higher Education. These students receive minimal government support, however, can be eligible for a range of scholarships and bursaries to financially assist their international education.

²⁹ *Circular Flow Model* n.d., CFI, viewed 17 September 2021,

<[³⁰ *Budget 2021-22* 2021, Department of Education, Skills and Employment, Australian Government, viewed 26 August 2021,](https://corporatefinanceinstitute.com/resources/knowledge/economics/circular-flow-model/#:~:text=Five%2DSector%20Model,-The%20fifth%20sector&text=it%20includes%20banks%20and%20other,the%20sectors%20that%20need%20money.>.</p>
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³¹ *Ibid*

³² *Commonwealth supported places* 2021, Australian Government, viewed 26 August 2021,

<[>.](https://www.studyassist.gov.au/help-loans/commonwealth-supported-places-csps)

³³ *HECS-HELP* 2021, Australian Government, Study Assist, viewed 30 August 2021, <[>.](https://www.studyassist.gov.au/help-loans/hecs-help)

OUTCOME

A subsidy is a cash paid grant to domestic organisations by the Government as part of the fiscal policy whereby the Government is attempting to influence the activities of their economy.³⁴ The implementation of this expansionary policy has the objectives to increase supply of particular goods and services by reducing costs of the businesses.³⁵ Figure 6 showcases the current supply and demand curve of Higher Education in Australia based on the most current report of university students with an equilibrium to the average price of attaining a bachelor's degree, indicating that when the average price is considered of AU\$24,000, 1.5 million individuals will attend university.³⁶

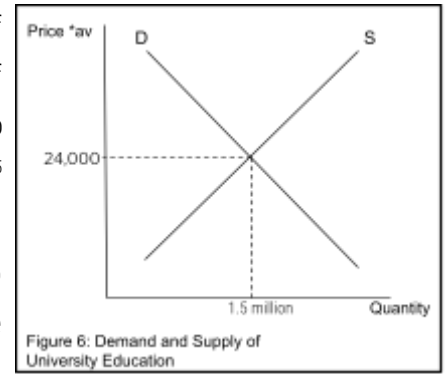
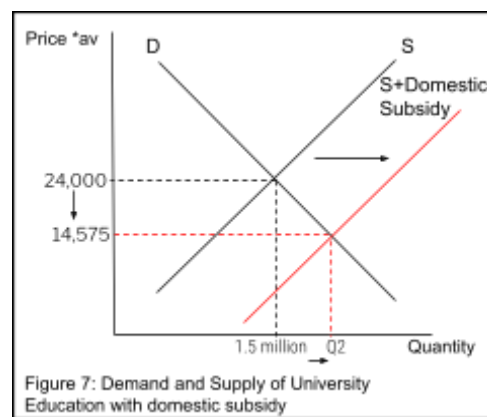
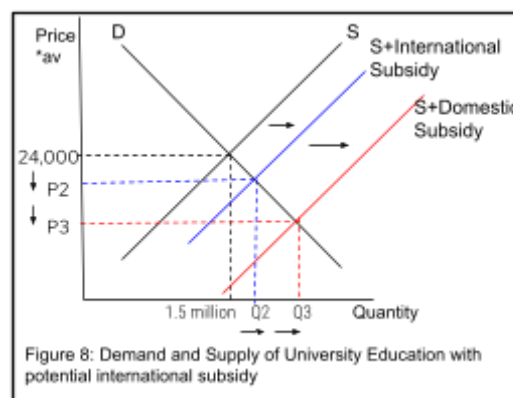


Figure 7 explores the impact of the market for Higher Education as the domestic subsidy of the CSP is introduced. Through the program, the institutions receive payments from the Government to allow students tuition to be reduced. As the subsidy increases supply, the price of Higher Education falls to AU\$14,575 with an increased quantity.³⁷ This will expand demand as Higher Education is now more affordable for the population.



If the Government were to introduce a new subsidy for international students the market for Higher Education would be impacted as appeared in Figure 8. For international students there are already large costs associated with studying in Australia such as accommodation, travel costs and general living expenses which damage the living conditions of these individuals.³⁸ Therefore, the Government could consider applying a subsidy program to the institutions for international students. This policy would produce a similar effect as the CSP such that the price of attending university would be reduced as the supply is increased. This correspondingly expands the demand for Higher Education due to affordability and makes Australian education appealing.



³⁴ Horsley, M, Esterbauer, E, Kirkby, L, Layman, A & Mules, R 2006, *Cambridge Economics HSC*, Cambridge University Press, Cambridge, VIC.

³⁵ *Subsidy* 2021, CFI, viewed 2 September 2021, <<https://corporatefinanceinstitute.com/resources/knowledge/economics/subsidy/>>.

³⁶ Jackson, C. Op cit

³⁷ *Study Assist* 2021. Op cit

³⁸ *Education and living costs in Australia* 2021, Australian Government, viewed 6 September 2021, <<https://www.studyaustralia.gov.au/english/live-in-australia/living-costs>>.

EVALUATION

The recommendation to introduce an international student subsidy to universities has a range of outcomes with both negative and positive aspects. The subsidy could be provided directly to the universities as an amount determined by the number of international students attending each year, in order to allow the tuition to be reduced. This is likely to increase the demand for Australian International Education, as well as, domestic demand by increasing the potential level of consumption to reduce the price.³⁹ Through this funding, there would be the positive intended consequence which would occur such that through more participation in university education, there will be a higher level of skilled workers in the economy as a larger attendance of Higher Education occurs due to the lowered prices.⁴⁰ Furthermore, the unintended benefit of a potential fall in unemployment will become evident with an increase in Higher Education, whereby, positions of lecturers, administrators and cleaners will need to be filled which contributes to economic growth.⁴¹

Additionally, as the levels of exports increase the Australian economic growth is benefited. It is important to have strong economic growth as it reflects the living conditions beneficial for the population by opening more jobs, raising wages and better quality research into development.⁴² This leads to the unintended consequence of a rise in aggregate demand as more consumption occurs due to higher wages. The five sector circular flow model reflects these consequences, whereby increasing exports will result in an increase of consumption and income towards the aggregate demand. However, if inflation were to rise at a greater rate than annual wages for low income earning households, the purchasing power of said households would decrease such that everyday items become unaffordable. Saying this, there are also the known negatives of providing this subsidy as many believe the federal budget allocation should focus on more important factors, such as support of an expansion following the COVID-19 Pandemic where the economy is trading below the desired rate. Nevertheless, it is vital to maintain economic growth and hold a skilled workforce which can be attained by the Government allocating international student subsidies to universities, particularly during the struggling time of border lockdowns.

³⁹ *The benefits of university education*. Op cit

⁴⁰ Hayes, A. Op cit

⁴¹ Jackson, C. Op Cit

⁴² Roser, M. Op cit

REFERENCES:

- Australians pursuing higher education in record numbers* 2017, Australian Bureau of Statistics, viewed 3 August 2021, <<https://www.abs.gov.au/AUSSTATS/abs@.nsf/mediareleasesbyReleaseDate/1533FE5A8541D66CCA2581BF00362D1D>>.
- Budget 2021-22* 2021, Department of Education, Skills and Employment, Australian Government, viewed 26 August 2021, <<https://www.dese.gov.au/about-us/corporate-reporting/budget/budget-202122#toc-higher-education-research-and-international>>.
- Cadence Economics 2016, *THE GRADUATE EFFECT: HIGHER EDUCATION SPILLOVERS TO THE AUSTRALIAN WORKFORCE*, REPORT, Universities Australia.
- Circular Flow Model* n.d., CFI, viewed 17 September 2021, <<https://corporatefinanceinstitute.com/resources/knowledge/economics/circular-flow-model/#:~:text=Five%2DSector%20Model,-The%20fifth%20sector&text=It%20includes%20banks%20and%20other,the%20sectors%20that%20need%20money.>>.
- Commonwealth supported places* 2021, Australian Government, viewed 26 August 2021, <<https://www.studyassist.gov.au/help-loans/commonwealth-supported-places-csps>>.
- Education and living costs in Australia* 2021, Australian Government, viewed 6 September 2021, <<https://www.studyaustralia.gov.au/english/live-in-australia/living-costs>>.
- Ganti, A 2021, *Multiplier Effect*, viewed 7 August 2021, <<https://www.investopedia.com/terms/m/multipliereffect.asp>>.
- Hayes, A 2021, *Skilled Labor*, viewed 7 August 2021, <<https://www.investopedia.com/terms/s/skilled-labor.asp>>.
- HECS-HELP* 2021, Australian Government, Study Assist, viewed 30 August 2021, <<https://www.studyassist.gov.au/help-loans/hecs-help>>.
- Horsley, M, Esterbauer, E, Kirkby, L, Layman, A & Mules, R 2006, *Cambridge Economics HSC*, Cambridge University Press, Cambridge, VIC.
- Jackson, C 2019, *Universities Australia DATA SNAPSHOT*, Universities Australia, pdf, viewed 2 July 2021, <<https://www.universitiesaustralia.edu.au/wp-content/uploads/2019/06/Data-snapshot-2019-FINAL.pdf>>.
- Nash, J 2021, *Shifts in the Production Possibilities Curve*, viewed 14 September 2021, <<https://study.com/academy/lesson/shifts-in-the-production-possibilities-curve.html>>.
- Osborne, P 2015, *Why are international students charged such high fees in Australia?*, viewed 4 July 2021, <<https://www.abc.net.au/radionational/programs/ockhamsrazor/why-are-international-students-charged-high-fees/6908188>>.
- Roser, M 2021, *What is economic growth? And why is it so important?*, viewed 14 September 2021, <<https://ourworldindata.org/what-is-economic-growth>>.
- Stages of the Economy* n.d., Lumen, viewed 7 August 2021, <<https://courses.lumenlearning.com/wm-introductiontobusiness/chapter/new-reading-economic-stages/>>.
- StudyAssist* 2021, Australian Government, Commonwealth Supported Places, viewed 4 July 2021, <<https://www.studyassist.gov.au/help-loans/commonwealth-supported-places-csps>>.
- StudyAssist* 2021, Australian Government, Non-Australian Citizens, viewed 4 July 2021, <<https://www.studyassist.gov.au/help-loans/non-australian-citizens>>.
- Subsidy* 2021, CFI, viewed 2 September 2021, <<https://corporatefinanceinstitute.com/resources/knowledge/economics/subsidy/>>.
- The benefits of university education* 2021, Monash University, viewed 2 July 2021, <<https://www.monash.edu/study/why-choose-monash/information-for-parents/the-benefits-of-university-education>>.
- The Production Possibilities Frontier* n.d., Khan Academy, viewed 17 September 2021, <<https://www.khanacademy.org/economics-finance-domain/microeconomics/basic-economic-concepts-gen-micro/production-possibilities/a/the-production-possibilities-frontier-and-social-choices-cnx-2>>.
- The University of Adelaide* 2021, viewed 3 August 2021, <<https://www.adelaide.edu.au/>>.
- The value of international education to Australia* 2015, Australian Government, pdf, viewed 15 August 2021, <<https://internationaleducation.gov.au/research/research-papers/Documents/ValueInternationalEd.pdf>>.
- Tomazin, F 2021, *International student losses set to punch \$18 billion hole in economy*, viewed 15 August 2021, <<https://www.theage.com.au/national/international-student-losses-set-to-punch-18-billion-hole-in-economy-20210403-p57ga7.html>>.
- Unemployment: Its Measurement and Types* n.d., Reserve Bank of Australia, viewed 7 August 2021, <<https://www.rba.gov.au/education/resources/explainers/unemployment-its-measurement-and-types.html>>.