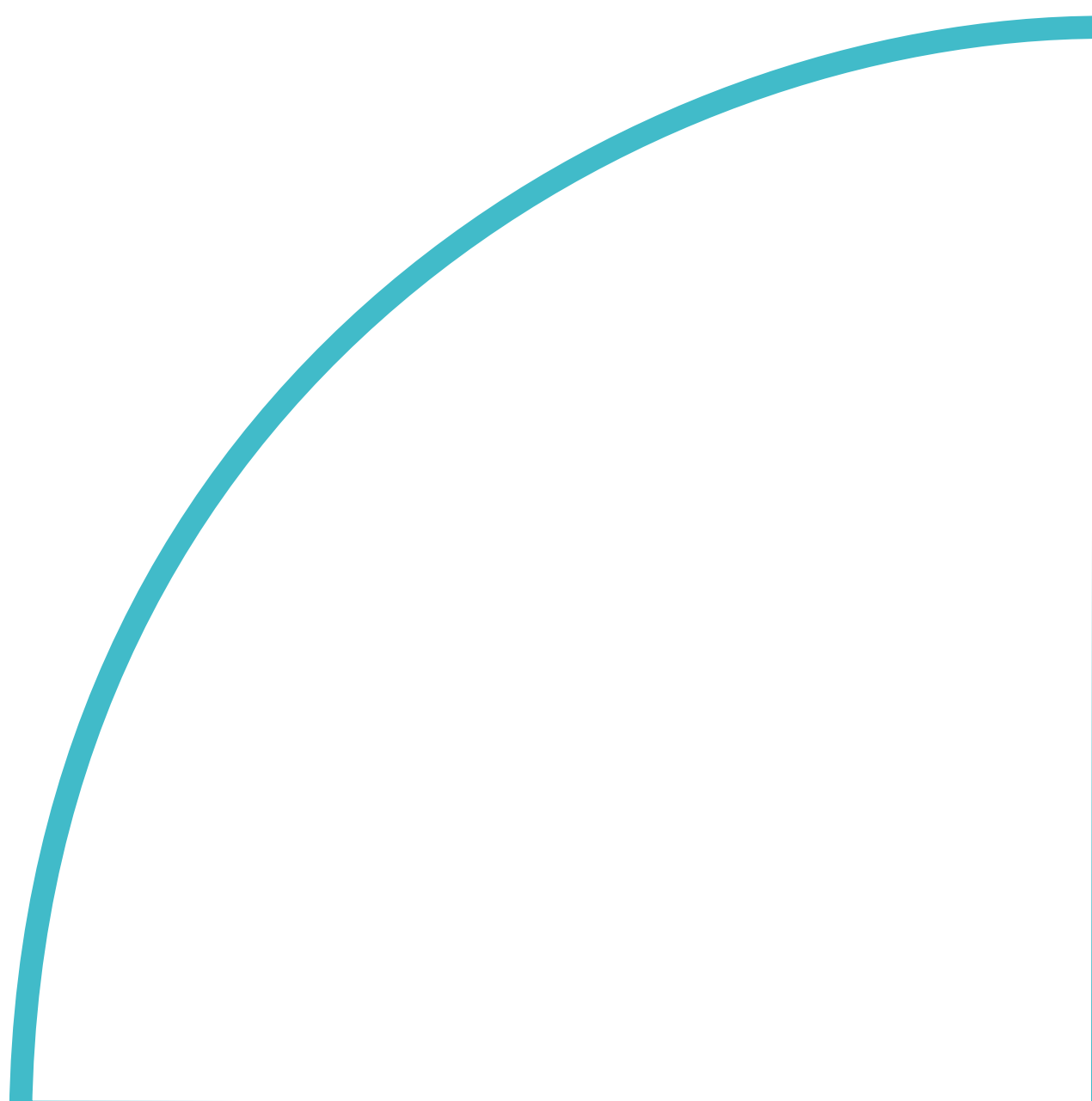


# Economic Contribution of Aix-Marseille Université

## 2019

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A report to Udice  
February 2021





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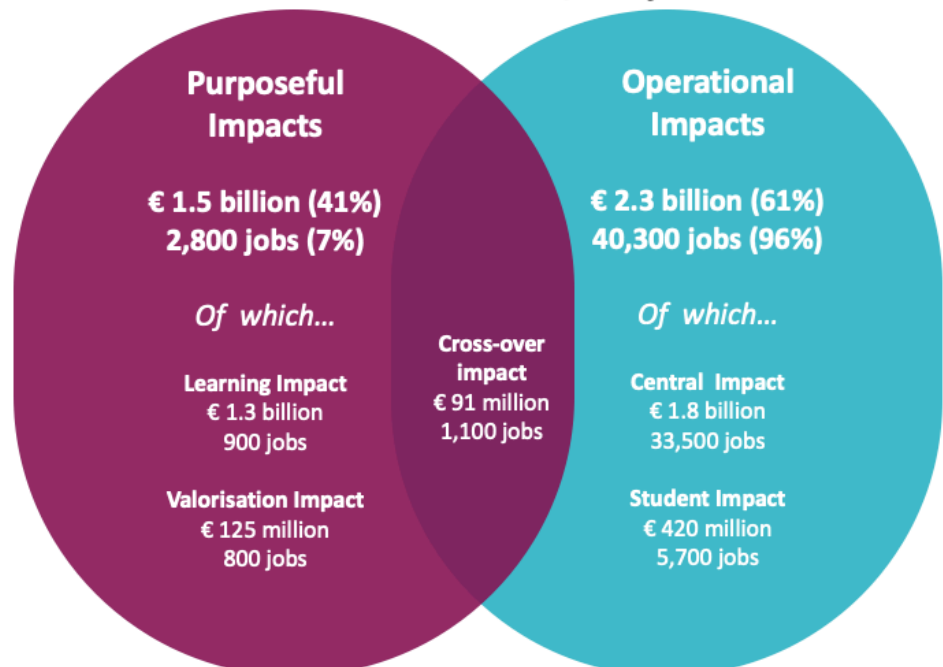
# 1. Executive Summary

## Aix-Marseille Université contributes €3.7 billion GVA and 42,000 jobs to Provence - Côte d'Azur.

The University's impact is driven by its income of € 750 million, its 8,100 members of staff and its 62,600 full-time students from which there is an annual cohort of 22,500 graduates. It also works in partnership with National Research Organisations (NROs) which have a staff complement of 18,000 people and an income of € 940 million. Of the Gross Value Added (GVA<sup>1</sup>) impact this creates in Provence - Côte d'Azur:

- 41 % comes from **purposeful impacts**, such as the learning and valorisation activity which it delivers; and
- 61 % comes from **operational impacts**, such as the central and student activity which reflect the scale of the organisation<sup>2</sup>.

### Total Impact in Provence – Côte d'Azur: € 3.7 billion and 42,000 jobs



The University's impact across France is estimated at €6.7 billion GVA and 60,400 jobs and globally it is estimated at € 7.5 billion GVA and 68,800 jobs. In addition, it creates a fiscal impact of € 3.5 billion each year for the French treasury.

<sup>1</sup> Gross Value Added (GVA) is a measure of economic output and is expressed in Euros (€).

<sup>2</sup> The % do not sum to 100% as crossover impacts are included in both totals (see section 2).



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## 2.

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# Introduction

This report describes the economic contribution made by Aix-Marseille Université.

## 2.1 University Background

The Aix-Marseille Université (AMU) is based in nine cities across southern France. It was formed in 2012 through the merger of three universities: the Université de Provence (Aix-Marseille I), the Université de la Méditerranée (Aix-Marseille II), and Université Paul Cézanne (Aix-Marseille III). Its origins in some cases date back to the 15<sup>th</sup> Century.

In 2019 Aix-Marseille Université had 62,600 full-time students, 8,100 academic and administrative staff and a total income of € 750 million. It also works with NROs which have a staff complement of 18,000 people and an income of € 940 million.

It is structured around five disciplinary sectors in arts, letters, languages and human sciences; law and political science; economics and management; health and science and technology. In addition, three University Institutes of Technology and University Institutes for Teacher Training are part of the university.

In 2020, Aix-Marseille University was among the top 100 Young Universities in the World in the Times Higher Education Rankings. The ARWU (Shanghai) Rankings for 2020 place the University in the top 150 universities worldwide for its overall performance.

It is a member of the European Universities CIVIS Alliance along with seven other universities across Europe. Its collective aim is to create a European civic university alliance.

## 2.2 Framework

Universities are fundamentally important to advanced economies. They provide new knowledge and facilitate its diffusion, fuelling productivity growth which is the basis for driving economic growth. As a result, universities are critical in driving economic growth through their role as providers of knowledge and innovation.

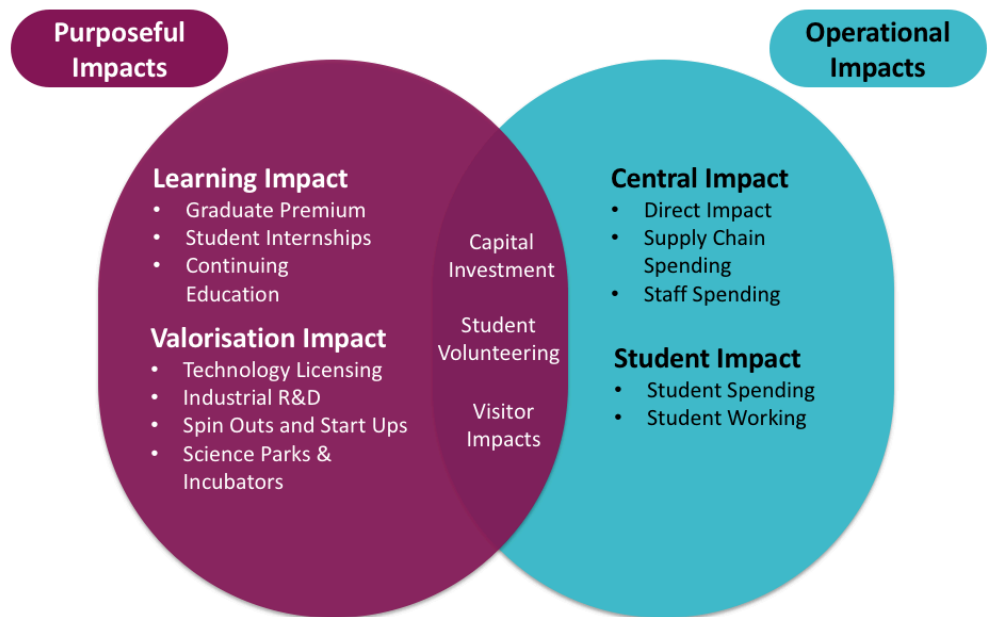
The contributions associated with Aix-Marseille Université can be grouped into two main categories: **purposeful impacts** and **operational impacts**.

- **Purposeful impacts** are associated with the nature of the activity undertaken by the University and reflect outcomes designed specifically to drive innovation and productivity growth within the economy. They mainly include the **learning and valorisation impacts** generated by the University.

- **Operational impacts** result from the existence of any large organisation with a significant staff complement, an extensive supply chain and a large consumer base. These types of impacts occur regardless of the nature of the organisation and for this reason they can be thought of as operational. They mainly include the **central impacts** such as staff and supplier expenditure and the **student impacts** from student expenditure and student part-time employment.

The distinction between purposeful and operational impacts is depicted in Figure 2-1 which illustrates that certain impacts crossover into both categories. Capital investment, student volunteering and visitor impacts have both a purposeful impact on the wider economy but depend strongly on the operational core. However, these are relatively small impacts, representing only around 2% of the total impact generated. They have been included in the totals for both purposeful and operational impacts in the following sections.

**Figure 2-1 Framework - Purposeful and Operational Impacts**



Source: BIGGAR Economics

This distinction provides a useful framework for analysing the impact of the University in a way that reflects the meaningful contribution it makes to economic development. It has been used to summarise and describe the impacts created by all the Udice members.

## 2.3 Study Outputs

All impacts are calculated based on the University's contribution over the course of a year and, in this case, data relate to 2019.



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The economic impacts of Aix-Marseille Université are reported in terms of two commonly used measures:

- **Gross Value Added (GVA)**, which is a measure of economic output and is expressed in Euros (€); and
- **jobs (employment)** which is expressed as headcount employment.

GVA impacts are reported to nearest whole € million, or in € billion to 1 decimal point, whichever is most appropriate. Jobs and student numbers are reported to the nearest 100.

The methods used to calculate impacts are fully explained in Appendix C of the main report.



## 3. Purposeful Impacts

This section summarises the purposeful impacts associated with Aix-Marseille Université.

The learning impact and the valorisation activity created by the University generate purposeful impacts for the economy.

### 3.1 Learning Impact

The learning impact comes from the lifetime earnings premium achieved by the university's graduates, the student internships it facilitates and the continuing education it provides to support professional development.

In 2019, Aix-Marseille Université had 22,500 graduates, it arranged 4,600 internships for its students and it received € 14.5 million income for providing training and education for professional development courses.

Combining these elements, the learning impacts generated by Aix-Marseille Université contribute € 1.3 billion GVA and support 900 jobs in Provence – Côte d'Azur.

**Table 3-1: Learning Impact of Aix-Marseille Université**

	Provence – Côte d'Azur	France	Global
GVA (€ billion)	1.3	2.2	2.3
Employment	900	2,100	2,800

Source: BIGGAR Economics Analysis

### 3.2 Valorisation Impact

Valorisation activity includes the impacts arising from licensing and technology; industrial research and development; spin outs and start-ups; and the science parks and incubators associated with the University.

Aix-Marseille Université received € 1.5 million in licensing income and € 88.8 million from industrial research. It was associated with 45 spin-out and start-up businesses and also supported the creation of spin-out and start-up businesses through its partner NROs.

It was estimated that these activities contribute € 125 million GVA and support 800 jobs in Provence - Côte d'Azur.



**Table 3-2: Valorisation Impact of Aix-Marseille Université**

	Provence – Côte d’Azur	France	Global
GVA (€ million)	125	974	1,281
Employment	800	3,400	7,200

Source: BiGGAR Economics Analysis

In addition to the learning and valorisation impacts, the crossover impact arising from capital investment, student volunteering and visitor expenditure form part of the purposeful impacts. These support € 91 million GVA and 1,100 jobs throughout the region.

### 3.3 Summary of Purposeful Impacts

The purposeful activities of Aix-Marseille Université create an economic contribution of € 1.5 billion GVA and support 2,800 jobs in Provence – Côte d’Azur. This represents 41% of the total economic contribution created by Aix-Marseille Université in Provence – Côte d’Azur.

**Table 3-3: Purposeful Impacts from Aix-Marseille Université**

	Provence – Côte d’Azur	France	Global
GVA (€ billion)	1.5	3.3	3.8
Employment	2,800	7,700	12,600

Source: BiGGAR Economics Analysis





## 4. Operational Impacts

Operational impacts arise from the central activities of employing staff and spending on goods and services, as well as the working and spending patterns of the student community.

### 4.1 Central Impact

The central impact of Aix-Marseille Université is comprised of its direct impact, its supply chain impact and its staff spending impact. In 2019, the University and its NRO partners received a total income of € 1.7 billion and had a combined staff complement of 26,100 people. They spent a total of € 600 million on supplies of goods and services and € 1.15 billion on staff costs.

**Table 4-1 Income and Expenditure of Aix-Marseille Université**

	University	NRO	Total
Income (€ million)	750	940	<b>1,690</b>
Staff Complement (headcount)	8,100	18,000	<b>26,100</b>
Supply Expenditure (€ million)	110	490	<b>600</b>
Staff Costs (€ million)	560	580	<b>1,150</b>

Source: BIGGAR Economics Analysis (Note, figures may not sum due to rounding.)

Summing the economic impacts of these activities, it is estimated that Aix-Marseille Université contributes € 1.8 billion GVA to the regional economy and supports 33,500 jobs in the region through its central activities.

**Table 4-2: Central Impact of Aix-Marseille Université**

	Provence – Côte d'Azur	France	Global
GVA (€ billion)	1.8	2.8	3.1
Employment	33,500	45,400	48,400

Source: BIGGAR Economics Analysis

### 4.2 Student Impact

The student impact is generated through the day-to-day spending and working habits of students attending courses at the University. The focus is on full-time students, as



the spending patterns and labour market contribution of part-time students is mostly driven by their work rather than their study. The University has 62,600 students who spend an estimated € 330 million in the local economy during their studies.

The economic contribution generated by students at Aix-Marseille Université is estimated to be € 420 million GVA and supports 5,700 jobs in Provence - Côte d'Azur.

**Table 4-3: Student Impact of Aix-Marseille Université**

	Provence – Côte d'Azur	France	Global
GVA (€ million)	420	563	602
Employment	5,700	7,300	7,800

Source: BIGGAR Economics Analysis

In addition to the central and student impacts, the crossover impact arising from capital investment, student volunteering and visitor expenditure form part of the operational impacts. These support € 91 million GVA and 1,100 jobs throughout the region.

## 4.3 Summary of Operational Impacts

The operational activities of Aix-Marseille Université create an economic contribution of € 2.3 billion GVA and support 40,300 jobs in Provence – Côte d'Azur. This represents 61% of the total economic contribution created by Aix-Marseille Université in Provence – Côte d'Azur.

**Table 4-4: Operational Impacts from Aix-Marseille Université**

	Provence – Côte d'Azur	France	Global
GVA (€ billion)	2.3	3.6	3.9
Employment	40,300	54,800	58,700

Source: BIGGAR Economics Analysis



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## 5. Transformation and Legacy Impact

Beyond the quantitative impact created by the University, it plays an important qualitative role in driving the transformation of higher education both in France and across Europe. It is helping to build the fabric of communities and protecting essential capital assets for current and future economic and social well-being.

Universities in general are good for economic and social well-being and a large research university, such as Aix-Marseille Université which is actively engaged in research, knowledge exchange and outreach is a major driver of economic and social development. It is helping to shape and transform individuals and economies, leaving behind a lasting, positive impact for future generations. This section describes four key ways in which the University is creating a transformation and legacy impact.

### 5.1 IdEx University

Aix-Marseille Université is an IdEx university, a prestigious title held by a small group of universities which are actively engaged in a programme to transform higher education in France. IdEx universities develop and promote innovation and excellence in key areas such as education, teaching methods, themed scientific research, support for research projects, synergies with other institutions, knowledge transfer with industry, international relationships and visibility, the student experience and cultural life.

This is changing the international profile of French higher education, bringing visibility and recognition for the country's strong academic reputation. The long-term goal of the IdEx programme is to create universities capable of competing with their foreign counterparts at an international level in terms of visibility, attractiveness, their impact on globally scientific challenges, research, innovation and social direction.

### 5.2 European Universities Initiative

Aix-Marseille Université is part of a flagship project launched by the European Commission in 2019 to build a European Education Area.



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The transnational alliances formed through the European Universities bring together higher education institutions to benefit students, teachers and society. They aim to become the universities of the future, promoting European values and identity, and revolutionising the quality, attractiveness and competitiveness of European higher education. Universities that are part of the Initiative offer freedom for students to study across Europe, as well as creating benefits for teachers and researchers who can pool their knowledge and resources to best effect. EU funding programmes such as Science with and for Society (Swafs), which is part of the Horizon 2020 Programme, supports universities in Europe to share their research findings with a wider audience through enhanced public engagement.

Aix-Marseille Université is a member of the European Universities CIVIS Alliance along with seven other universities across Europe. Its collective aim is to create a European civic university alliance.

### 5.3 Contribution to OECD Better Lives Outcomes

Measuring the well-being of people and the progress of societies is a key priority for the OECD, whose overarching mission is to promote “Better Policies for Better Lives”<sup>3</sup>. They created the Better Life Index in 2011 to address this issue<sup>4</sup>. It is a tool which allows comparison between countries on 11 dimensions of current well-being that make a better life in terms of:

- **Material living conditions** – housing, income and jobs; and
- **Quality of life** – community, education, environment, governance, health, life satisfaction, safety and work-life balance.

To provide resources for future well-being, the OECD’s Well-being Framework highlights the importance of **building and protecting the four capitals**: the natural, human, economic and social resources that are necessary to sustain and grow for future generations.

Aix-Marseille Université and its partner NROs make significant contributions towards all of these aspects by:

- providing, well-paid, high-quality, stable and fair employment;
- bringing education to its students which is shown to improve life outcomes, positively influencing personal identity, health, life satisfaction and community vitality; and
- carrying out fundamental and applied research which supports the four capitals of the socio-economic and natural systems that are critical for lasting and resilient economic well-being.

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<sup>3</sup> OECD, 2020, [Better Life Initiative](#)

<sup>4</sup> <http://www.oecdbetterlifeindex.org/>



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Ultimately, their work will lead to improvements in the quality of life for individuals and help to address the fundamental global issues of our time such as climate change, green energy, global health and digital technology.

## 5.4 Universities and Economic Resilience

Universities are fundamentally important to advanced economies such as France, driving innovation and, by extension, economic growth. There are proven, multi-layered links between education and wider economic wellbeing.

The COVID-19 pandemic has delivered the greatest shock to the global economy in modern times and, in parallel, it has brought a rare opportunity to build back a better economic future. In France, a national recovery plan worth €100 billion was announced in September 2020<sup>5</sup> with the aim of recovering the 2019 level of GDP by 2022. It seeks to strengthen the country's industrial resilience and includes measures to support green and digital transitions as well as structural reforms planned by government to further improve the competitiveness, attractiveness and productivity of the French economy.

In this context it is worth acknowledging that universities have a powerful, long-term role in strengthening economic resilience in a way which is sustainable, equitable and transformative. This view is supported by influential global policy makers who have identified investment in education and R&D as priorities for long-term fiscal recovery, which will also support the desired focus on a green transition that is a shared goal in most advanced economies<sup>6</sup>.

To support economic recovery and build economic resilience, there is an opportunity for universities to demonstrate the powerful role they can have, including:

- securing and providing high quality employment;
- providing the human and intellectual capital necessary for both economic recovery and transformation;
- driving innovation for new and existing businesses and public sectors;
- reducing and avoiding youth unemployment, avoiding life-long scarring effects for those unemployed as a result of the pandemic;
- building the resilience of public services, including the health and care sectors;
- supporting the net zero challenge and the green recovery, helping to provide the intellectual and human capital on which it will be based;
- providing leadership in national and regional economies as well as in wider civic society; and
- rebuilding the tax base to help ensure a net positive fiscal return which will help to pay for the cost of government assistance.

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<sup>5</sup> Minister for the Economy, Finance and the Recovery, 3<sup>rd</sup> September 2020, *France Relance*, Press Release

<sup>6</sup> Hepburn, C., O'Callaghan, B., Stern, N., Stiglitz, J., and Zenghelis, D. (2020), 'Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change?', Smith School Working Paper 20-02



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Universities have a crucial role to play in any advanced economy and they are particularly important in a time of uncertainty and change, which is the environment we are all living in now and will continue to be in for some years to come. In order to be sustainable and resilient, economic recovery and transformation needs to be based on knowledge and innovation. The universities sector will be the primary source of the human and intellectual capital required to make this a reality. At a regional level, Aix-Marseille Université gives its region an important degree of control over its own economic destiny.



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## 6.

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# Total Economic Impact

Aix-Marseille Université contributes € 3.7 billion GVA and supports 42,000 jobs in Provence – Côte d'Azur.

Combining the impacts discussed in this report, the total annual contribution of Aix-Marseille Université is:

- **€ 3.7 billion GVA** and **42,000 jobs** to the regional economy;
- **€ 6.7 billion GVA** and **60,400 jobs** in France; and
- **€ 7.5 billion GVA** and **68,800 jobs** globally.

The University's purposeful impact in the region is worth around € 1.5 billion GVA, or 41% of its total impact. Its operational impact is € 2.3 billion GVA, or 61% of its total impact regionally<sup>7</sup>.

On this scale, every € 1 received by the University creates a GVA impact of € 2.20 throughout the regional economy. Every job directly created by the University supports 1.6 jobs throughout the region.

The impact of Aix-Marseille Université at a regional, national and global level by source of impact is shown in Table 6-1.

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<sup>7</sup> The % do not sum to 100% as the crossover impacts are included in both totals.



**Table 6-1: Total Economic Impact of Aix-Marseille Université**

GVA (€ million)			
	Provence – Côte d'Azur	France	Global
Learning Impact	1,324	2,168	2,285
Valorisation Impact	125	974	1,281
Central Impact	1,751	2,847	3,078
Student Impact	420	563	602
Crossover impacts (capital, volunteering, tourism)	91	185	227
<b>Total</b>	<b>3,710</b>	<b>6,737</b>	<b>7,473</b>
Employment			
Learning Impact	900	2,100	2,800
Valorisation Impact	800	3,400	7,200
Central Impact	33,500	45,400	48,400
Student Impact	5,700	7,300	7,800
Crossover impacts (capital, volunteering, tourism)	1,100	2,200	2,500
<b>Total</b>	<b>42,000</b>	<b>60,400</b>	<b>68,800</b>

Source: BIGGAR Economics Analysis (Notes: Figures may not sum due to rounding.)

The fiscal impact arising from the University is worth € 3.5 billion to the French treasury each year.



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