

INTELLIGENCE BRIEF NO. 01 | 2016: INCOME AND PURCHASING POWER OF STUDENTS IN EUROPE¹

The EUROSTUDENT project collects internationally comparative data on the social dimension of higher education in Europe. The data cover a wide range of topic areas, e.g. students' socio-economic background, their living conditions, and temporary international mobility of students. The project aims to enable reliable and relevant cross-national comparisons. The data presented here stem from the fifth round of the EUROSTUDENT project (2012-2015).

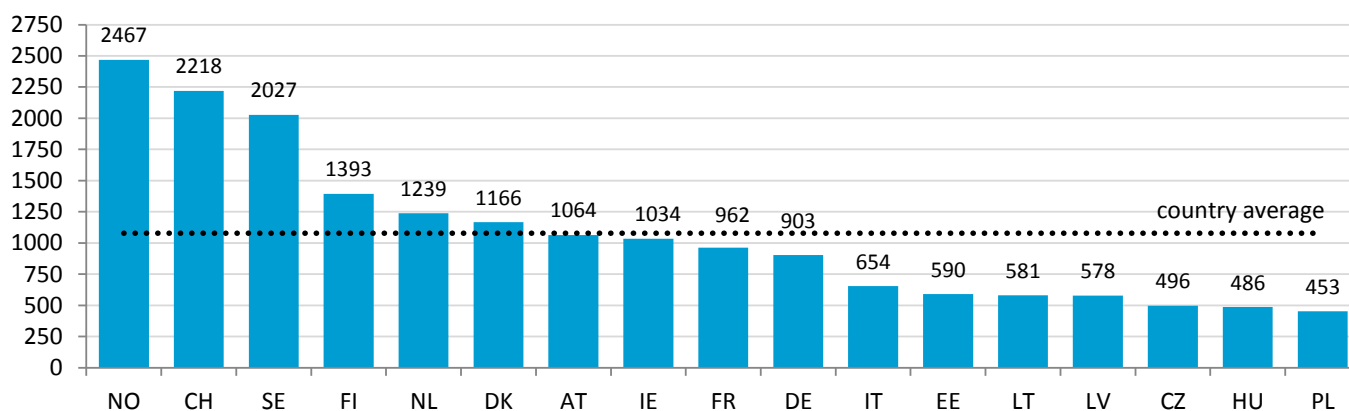
Overview

Large differences in students' average monthly incomes are found in the EUROSTUDENT countries. Using a variant of the "Big Mac Index" and thus controlling for different levels of purchasing power reduces these differences to an extent. On average across countries, students could afford 290 Big Mac burgers per month. Still, differences between the countries remain: in some countries, students would be able to buy more than 400 of these sandwiches a month, whereas in other countries, students could afford less than half as many.

How much money do students in Europe have at their disposal?

Sufficient funds are an important condition for taking up and successfully completing higher education studies. Students' income is therefore an important aspect for the EUROSTUDENT project in order to depict the social dimension of higher education in the different EUROSTUDENT countries (see Fig. 1). The income definition applied in the project does not only cover income gained through employment – the data also include income from students' family and/or partner, public funding (including grants, scholarships as well as loans), and other income, e.g. grants/loans by private companies or housing benefit from the state. For reasons of comparability, the data presented in Fig. 1 refer only to students not living with parents.

Figure 1: Average monthly income of students including transfers in kind² (in Euro) - only students not living with parents



Source: EUROSTUDENT V, G.1. Missing EUROSTUDENT data: RO, RU, UA.

On average across all EUROSTUDENT countries with available data, students' income amounts to 1,077 Euro. As could be expected, considerable differences can be found between countries with regard to students' income. In six of the 17 countries with available data, students' income lies above the EUROSTUDENT average. This is the

¹ Authors: Christoph Gwośc and Kristina Hauschildt, German Centre for Higher Education Research and Science Studies (DZHW).

² According to the EUROSTUDENT conventions, student income comprises cash money as well as transfers in kind. Transfers in kind are students' living and study-related costs that are paid by the students' parents, other relatives, or their partner. The respective payments go directly to the students' creditors. A transfer in kind is, for instance, the rent that some parents pay for their collegiate children who live away from the parents' home; the rent is directly transferred to the children's landlord. Transfers in kind are viewed as part of students' income which is intangible for the students.

case in the Nordic countries (Norway, Sweden, Finland, Denmark), Switzerland, and the Netherlands. In Norway, Switzerland, and Sweden, students' average income even exceeds the 2,000 € mark.³ In Finland, the Netherlands, Denmark, Austria, Ireland, France, and Germany, students' average income lies between 1,400 and 900 Euro. In the other EUROSTUDENT countries, students have on average less than 700 Euro per month available for financing their studies; in the Czech Republic, Hungary, and Poland, this amount lies even below 500 Euro.

How comparable are these results?

The data imply that students in the first group of countries have better living conditions than their fellow students in other countries, especially when compared to the group of countries on the far right in Fig. 1: the average student in Norway, for example, has more than five times as much income as the average student in Poland. Students in Norway therefore seem to be in an enviable position. But is it quite that easy?

The above comparison of students' average income is indeed not without its restrictions: although all values are depicted in Euro, not all countries were part of the Euro area at the time of the EUROSTUDENT surveys.⁴ The use of exchange rates to calculate Euro values for non-Euro countries affects not only the magnitude of students' average income, but also the order of the depicted countries in the graph. Additionally, considerable differences in countries' price levels may have an influence on the minimum amount of income needed by students to secure their living.

In order to compare the actual „value“ of students' income, a reference value, such as a country's per-capita-income or the poverty threshold, could be helpful. For methodological reasons, such a reference value is not easily available, as students' income and expenditure is different from other population groups. On the one hand, students have specific expenses that others do not, e.g. fees for studying or costs for learning material. On the other hand, the student status often confers benefits and price reductions not available to other people. Another option for strengthening the comparison of the different income levels would be to factor in the different price levels in the countries. For this, purchasing power standards, which would prevent the exchange rate problem and compensate for different price levels between countries, would be adequate. Purchasing power standards, however, are only applicable and valid under certain conditions, and, in addition, not easy to grasp intuitively.

A further option, which is pursued in the following, is to make reference to a homogenous product which is the same in all countries and therefore directly comparable. This is done by employing a variant of the Big-Mac-Index (see box). By directly indicating the number of Big Macs students could, in principle, afford (Fig. 2), this measure allows a clear and direct comparison of the purchasing power of students' income.

The Big-Mac-Index and a variant

For several decades, a Big Mac has consisted of the same ingredients in almost all countries in which it is offered due to strict franchising regulations: a sesame bun, beef patties, processed cheese, salad, onions, pickles, and sauce. The Big Mac is therefore a highly standardised (homogenous) good which can easily be compared between countries. The Big-Mac-Index compares the price of this good in different countries with the current price of a Big Mac in the USA (converting national currency into US-Dollars, if necessary). The Index then is used as a simple measure of over- or undervaluation of currencies (see The Economist: <http://www.economist.com/content/big-mac-index>)

This Intelligence Brief draws on the same principle by relating students' income to the price of a Big Mac (both in national currency). This allows a comparison of students' purchasing power across countries, expressed in the maximum amount of Big Macs students could potentially afford. In this way, the use of national currencies is circumvented in a simple way, while at the same time taking into account to some degree the different price levels students in the European Higher Education Area are confronted with.

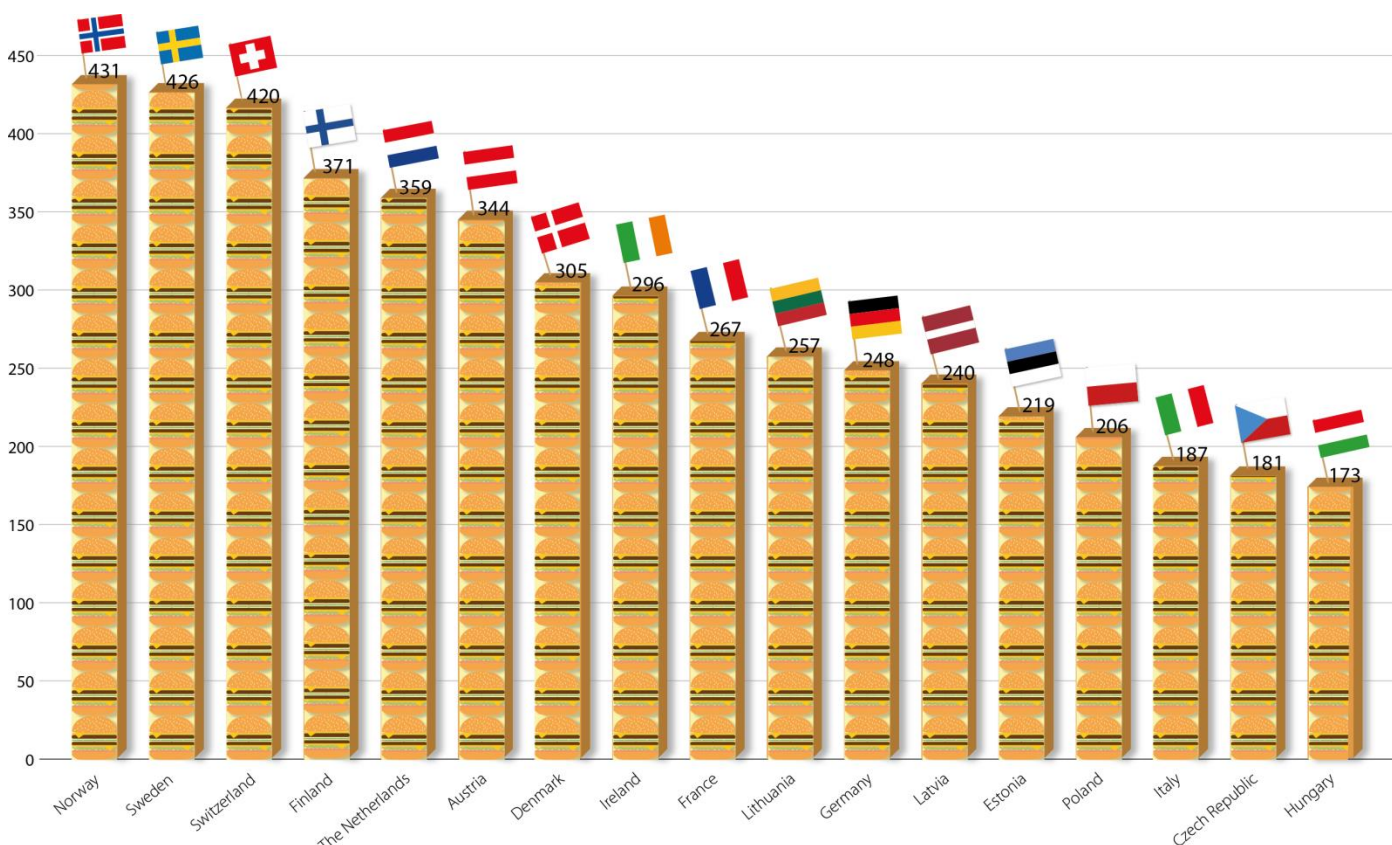
³ Data for Norway deviate from the EUROSTUDENT final report due to adjustments necessary in the meantime.

⁴ This applies to Denmark, Latvia, Lithuania, Norway, Poland, Sweden, Switzerland, the Czech Republic, and Hungary. Since then Latvia and Lithuania have adopted the Euro as statutory means of payment.

How many Big Macs can students afford with their income?⁵

On average across all EUROSTUDENT countries with available data, students could afford 290 Big Macs per month. Students in Norway, Sweden and Switzerland would be able to purchase more than 400 Big Macs with their monthly income (Fig. 2). In Finland, the Netherlands, Austria, and Denmark, the number of potentially consumable Big Macs is also – sometimes clearly – above-average, whereas the value in Ireland lies close to the average at 296 Big Macs. In France, Lithuania, Germany, Latvia, Estonia, and Poland, students’ income allows them to potentially buy less than 290 Big Macs. German students’ income, covering the cost of 248 Big Macs a month, places them in the lower midrange of values. Students in Italy, the Czech Republic, and Hungary are able to buy less than 200 of these burgers each month.

Figure 2: Number of potentially buyable Big Macs based on students’ income – only students not living with parents



Source: EUROSTUDENT V, G.1; The Economist data set Big Mac file 2000-July 2015. Missing EUROSTUDENT data: RO, RU, UA.

Does the order of countries change when looking at Big Macs instead of income? In fact, most countries remain in the same position or only move by one position. An exception to this is Italy: there, the purchasing power of students is lower than the nominal average income would predict. Accordingly, Italy has moved four positions to the right in Figure 2 compared with Figure 1. In Poland and Lithuania, the changes go in the opposite direction. In these countries, the purchasing power of students – as indicated by the chosen Big Mac standard – is relatively high. This results in these two countries moving three positions to the left in Figure 2.

Even if differences in the income levels still remain between the countries of the European Higher Education Area even when employing the Big Mac as an indicator for purchasing power, they are clearly reduced when compared to Figure 1. To draw again on the example used above: while the average student in Norway has more than five times the amount of income available in Euro as the average student in Poland, they would „only“ be able to afford twice as many Big Macs a month. Compared with the average Hungarian student, Norwegian students’ income allows them to buy 2.5 times as many burgers. Using real purchasing power (with regard to Big

⁵ The product referred to has been chosen only for analytical reasons. This publication is neither meant to advertise producer or product, nor are students encouraged to consume additional quantities of the product.

Macs) instead of students' nominal income therefore greatly reduced the variation between the countries in question. This also becomes apparent when looking at the difference between Germany and the respective neighbouring country in the two figures: the difference between German and Italian students' monthly income is 249 Euro (Fig. 1), whereas the difference between Germany and Latvia – expressed in Big Macs – is only 8 burgers (Fig. 2).

Clear differences in students' monthly income can be seen in the EUROSTUDENT countries even when using the Big Mac as an indicator for real purchasing power. The extent of these differences has, however, been strongly reduced in comparison to an analysis of Euro values. In spite of the simplicity of the indicator, the analyses show that employing the Big Mac Index can provide important information that further enhances the international comparison of students' income.

EUROSTUDENT V

Besides the question of the purchasing power of students' income, many other questions regarding students' financial situation are important: can differences in students' income with regard to age, sex, or educational background be identified? Is students' income distributed evenly among the student population? Do students experience financial difficulties or can they generate sufficient income? EUROSTUDENT offers answers to many of these questions in the report "[Social and Economic Conditions of Student Life in Europe](#)" (2015). The [EUROSTUDENT database](#) further enables country-specific analyses and targeted comparisons between countries. Further information is available on the EUROSTUDENT website: <http://www.eurostudent.eu/>.



Country abbreviations

AT = Austria
 CH = Switzerland
 CZ = Czech Republic
 DE = Germany
 DK = Denmark
 EE = Estonia
 FI = Finland

FR = France
 HU = Hungary
 IE = Ireland
 IT = Italy
 LT = Lithuania
 LV = Latvia
 NL = The Netherlands

NO = Norway
 PL = Poland
 RO = Romania
 RU = Russia
 SE = Sweden
 UA = Ukraine

This publication was commissioned and supported with funds by the German Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung, BMBF, grant agreement no. M520200). Responsibility for the content remains with the German Centre for Higher Education Research and Science Studies (DZHW).