

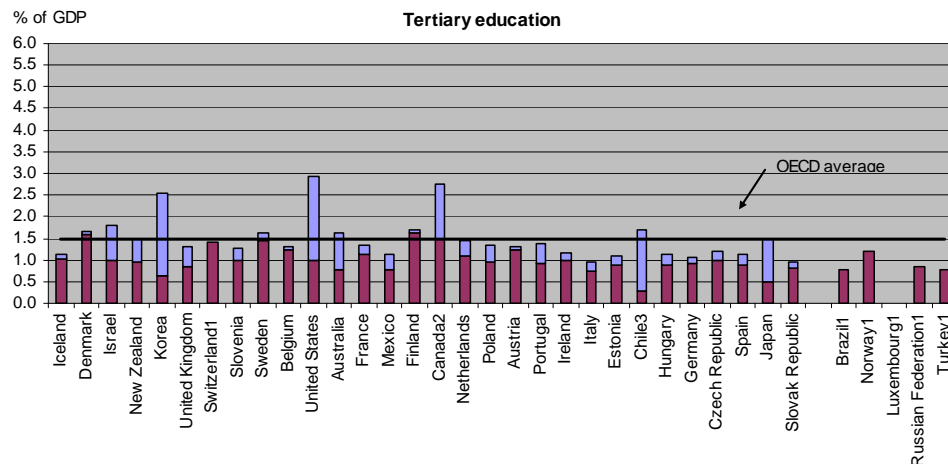
Higher education investments: International comparison

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February 2010

I. Public and private expenditure

- The Netherlands invests around 1.5% of its GDP into the tertiary sector, which is exactly the OECD average (Fig 1). Only the U.S., Canada and Korea invest considerably more in total, which is due to a large proportion of private investments. In terms of public investments, the Scandinavian countries, Canada and Switzerland invest more. In terms of private expenditures, the Netherlands is in the middle group: ahead of Scandinavian countries, but below the U.S., Japan, Korea and Canada.

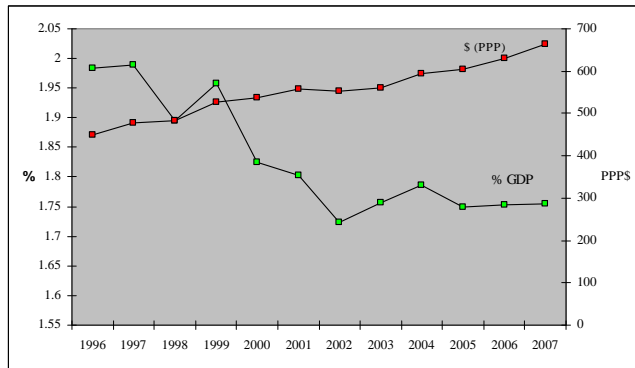
Fig 1. Expenditure on educational institutions as a percentage of GDP, 2006



Source: OECD Education at a Glance 2009, data source files at www.oecd.org.

- R&D investments have constantly increased over last 10 years, both in nominal value (euros) and real value (purchasing power parity) (Fig 2). The GDP, however, has grown even faster and therefore 'R&D as a percentage of GDP' has been going down.

Fig 2. Gross Expenditure on R&D as % of GDP and in \$PPP in the Netherlands (1996-2007)

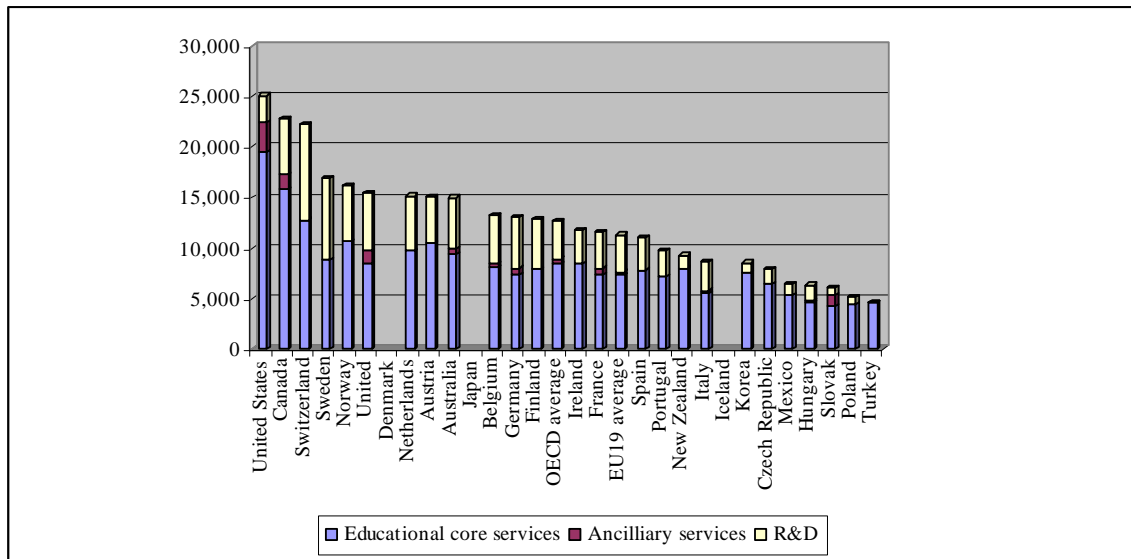


Data source: UNESCO

- The Netherlands is well above the OECD average in per student expenditures. When we look at the education costs only (not R&D and other services), then the US is clearly above the rest. While the US spends around 19,500USD per student, the Netherlands spends half of the sum (9,700USD in PPP). On the other hand, only three countries—U.S., Canada and Switzerland—have a significantly higher per student expenditure.(Fig 3)

Fig 3. Annual expenditure per student on core services, ancillary services and R&D, 2006)

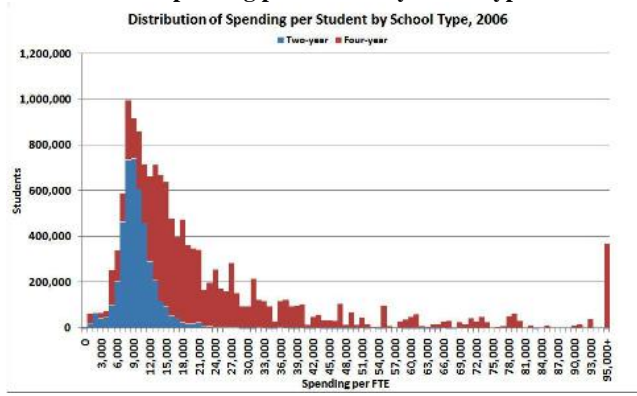
(In equivalent USD converted using PPPs for GDP, by level of education and type of service, based on full-time equivalents)



Source: Constructed based on OECD Education at a Glance 2009, data source files at www.oecd.org.

- While in Europe we can often hear an argument that more investment into higher education is needed in order to keep up with the U.S., there are several points about the U.S. system that need to be kept in mind.
 - While per student costs in most European costs are quite homogenous across the sector, in the US there are great differences and in the majority of the institutions the expenditure is not as high as the presented average (see Fig 4).

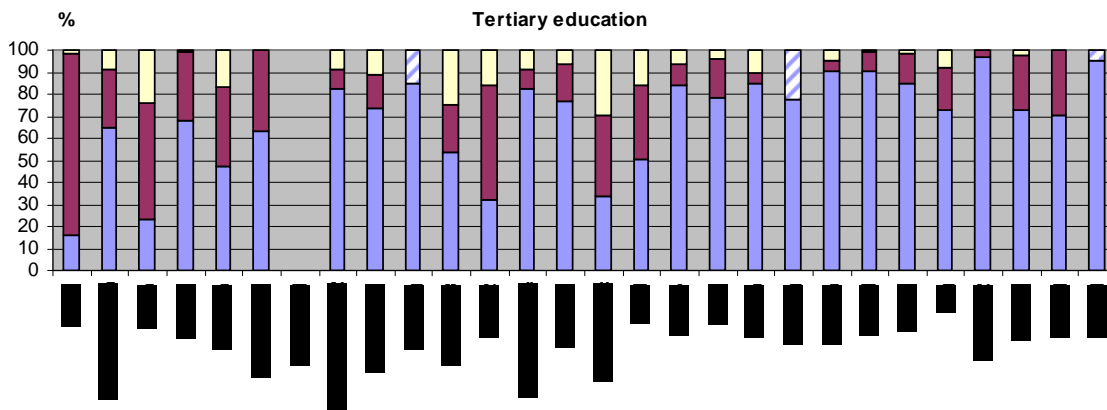
Fig 4. Distribution of spending per student by school type in the U.S. (2006)



Source: IPEDS from www.centerforcollegeaffordability.org

- Serious concerns have been raised in the U.S. that costs of higher education have escalated beyond a reasonable amount. Particularly the out-of-pocket costs to families have increased, over the rate of inflation and growth in earnings, making higher education costs burdensome to a middle-income family. As a result, there is a serious discussion if higher education is over-priced and over-invested. (For more detail see: “*Congressionally Mandated Studies of College Costs and Prices*”, by NCES)
- When we look at the sources of student expenditures, in the Netherlands the majority is covered from public sources, and a relatively small proportion is covered by students/families, and other private sources. (Fig 5)

Fig 5. Distribution of public and private expenditure on educational institutions (2006)



Legend: from bottom to top: public expenditure, household expenditure, expenditure of other private entities, other.

Source: OECD Education at a Glance 2009, data source files at www.oecd.org.

- In sum, the Netherlands seems to be a strong average in every respect in terms of higher education investments. Its total per student expenditure somewhat exceeds the OECD average; its public expenditure per student is among the higher in the world; its private expenditure is quite low, but higher than in most Scandinavian and many other countries.

III. Investment programmes

Many countries have put together targeted investment packages for the higher education sector. We can differentiate three main clusters of thematic investment programs that target the higher education sector. Below are some examples and highlights of such initiatives in these three categories.¹

1) Promoting innovation and university-industry partnerships

This is probably an investment stream that is most common in European countries. Since it is not the primary interest to the audience of the report, it is not discussed here further.

2) Promoting research excellence

This group includes investments with which a government attempts to create a “World Class University” from existing universities. The investments are used to create a few universities with very high level of research capacity, international reputation and prestige. The initiatives are often either implicitly or explicitly motivated by the performance in international university rankings. These programs tend to be multi-billion euro investments.

Germany: In 2005, the German federal and state governments passed the *Excellence Initiative*, a programme providing top universities with €1.9 billion in additional funding over five years (2006-2011). The Excellence Initiative has three funding tracks: (1) Research clusters that funds (inter)disciplinary networks across universities, (2) Graduate schools, and (3) Institutional strategies that fund the institutions as a whole. The last component has 50% of funding.

France: France policy-makers were disappointed in the performance of French universities in international university rankings and started an initiative to improve the situation. The new investment plan supports competitive research clusters and creates “super campuses”. 10 higher education and research federations have been selected for Operation Campus. Under the initiative the universities will share EUR 5 billion, intended to make them the highest ranking universities in the world. (Marshall 2008)

China: Project 211 is the Chinese government’s endeavor to strengthen about 100 institutions of higher education (ca 6%) and key disciplinary areas. Project 985 attempts to increase the international reputation of Chinese institutions, by supporting activities such as holding international conferences, attracting international staff, or supporting Chinese faculty to attend high-profile conferences abroad. Overall, the first phase of Project 211 (1996-2000) provided about RMB 18.3 billion in funds (= ca 2.7 billion USD with today’s exchange rate). The second phase of the Project increased the investment with an additional RMB 18.4 billion. In the third phase (2007-2011), the Chinese government has vowed to provide additional RMB 10 billion. (Cremonini 2009)

¹ It is impossible to provide a clear overview picture of different investment programs in different countries. It is often hard to distinguish what is a separate investment program and what is a general increase in the higher education budget. Also some programs receive more public attention than others on political reasons and the reasons of greater public interest in the topic, not necessarily because they have more money involved.

3) Promoting access to higher education

Several countries have increased investments into higher education in order to increase the access. These plans are justified by two reasons: either by a realization that students from certain socio-economic group do not have equal opportunities in the higher education, and/or to reach out to under-represented groups in order to increase the higher education participation rates in society.

United Kingdom: Between 2001–02 and 2007–08 the U.K. allocated £392 million of widening participation funding to higher education institutions. The sums have been constantly increasing: from €71 million in 2002-03 to €510 mln in 2006- 07. The funds target primarily potential students from lower socio-economic groups and underrepresented regions. (House of Commons 2009)

Australia: Bradley review recommends that the Australian Government should aim for a massive increase in the share of Australians aged 25-34 with degree qualifications from 29 per cent in 2006 to 40 per cent in 2020. As part of the 2009 Budget, the Government announced it will provide an additional \$5.4 billion to support higher education and research over the next 4 years in a comprehensive response to the Bradley Review. The quantum leap in resourcing is designed to support high quality teaching and learning, improve access and outcomes for students from low socio economic backgrounds, build new links between universities and disadvantaged schools, reward institutions for meeting agreed quality and equity outcomes, improve resourcing for research and invest in world class tertiary education infrastructure.

Germany: The projects of demographics in Germany show a rapid increased in student demand over next years, at the same time, the supply of study places is under pressure due to the ongoing transition to Bachelor and Master-programs. To cope with this situation, *Hochschulpakt 2020* sets a goal that 90,000 new study places will be created by 2010. Starting in 2007, the federal government and the Länder agreed to spend about €1 billion on these new study places. (Kaiser et al 2006)

France. At the end of 2005 a call for projects to promote equal chances in university was launched. 54 projects were selected, targeting better information for pupils in secondary education; better tutoring/ guidance for students in higher education (for those who need it) and an involvement of industry in achieving these objectives. This is however a smaller scale initiative. For 2006-2007 €3.7 million are allocated to these projects. (Kaiser et al 2006)

In addition to these three main themes there are other investment programs. For example, the Capital Development Pool in Australia gives \$71.5 million further infrastructure boost for Australian universities. The projects of up to \$5 million will improve vital teaching and learning facilities and allow for the expansion of curriculum in important subject areas.

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