



university of
 groningen

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Members of the Board of the University, Members of the Board of Trustees of the University, Commissioner of the King of the Province of Groningen Paas, Mayor of the City of Groningen Den Oudsten, staff-members and students of the University of Groningen, ladies and gentlemen,

Introduction

It is my privilege to welcome you here today in the historic Martini Church for the Opening Ceremony of the 2016/2017 Academic Year of the University of Groningen. It is very nice to see so many of you here today. This is the day that we celebrate our *Dies Natalis* and the start of the new academic year. Let me begin with taking some pictures of all of you for my Twitter Account!

A special welcome to our honorary guest speaker today, Professor Mario Panizza of the Roma Tre University: it is a true honour to have you here and I am happy to introduce you later on. A special welcome also to Mr Max van den Berg, former Commissioner of the King in our Province and Professor Luuk van Middelaar. Both of you will receive a reward (not the same!) this afternoon. We have three more prize-winners and the RUG Huisdichter on the program. So the schedule of today's Opening Ceremony is really busy!

Before turning to the core of our program and the moment that I will hand over control to our professional presenter, Mr Frank den Hollander, let me start with three items myself. First, I will cover a university-political issue that new investment in knowledge-based capital, for instance the digital society, is an absolute necessity for the prosperity of a country like ours in general and our university in particular. Next I will ask your attention to commemorate those who lost their lives in the past academic year. And finally, I am proud to introduce our two University of Groningen Spinoza-prize winners of 2016: Professors Lodi Nauta and Bart van Wees. They will both give a short presentation.

Before I comment on necessary investment in public knowledge-based capital, let me start by arguing that the last academic season has been one of the best in the recent history of the University of Groningen. I am not even trying to list all achievements, but let me mention a few: (1) in a record pace we are on a fast-speed track to establish the University of Groningen Yantai, our branch campus in China (2) we are really on the move in expanding our activities at the University Campus Fryslan and found a prestigious main headquarter-building in Leeuwarden: De Beurs, (3) we have accomplished all requirements set forward in the so-called

Prestatieafspraken. This implies for instance that, university-wide, instead of less than 50% in 2011, now more than 75% of our students complete their Bachelor programs in four years, (4) we have been by far more successful in obtaining prestigious awards, like the Spinoza prize. I will be more than happy to return to this issue later on! And finally (5) we have improved again our position on the Shanghai-ranking, now from 75 last year to 72 in 2016.

Digital Society

Academic success is fully conditional on funding. So allow me to start with a more political statement on the necessity of public investment in knowledge-based capital. Today all Dutch universities, united in VSNU, will deliver a clear statement to our policy makers in The Hague: on top of all the efforts described in the recent Dutch National Research Agenda, Dutch universities want to collaborate in the development of the *Digital Society*. In doing so universities want to join efforts with the corporate sector, research institutes and appropriate government bodies. That is the reason that not only universities emphasize the importance of the *Digital Society*, but also for instance the Dutch employer organization VNO-NCW.

After 2009 the western world faces modest economic growth rates: the Dutch economy is, unfortunately, exemplary. In general, low growth rates can be explained by a slowdown of demographic development, by modest investment and by small growth rates of labour productivity. Let us have a closer look at these three sources of growth. Demographic changes are clear in the Western world: due to low fertility rates we face a decreasing home population and we need immigration to maintain our working force. Turning to the second source of growth, investment, it is well known that investment in *physical* assets in developed economies is generally decreasing, most certainly after a financial crisis like we experienced a few years ago, and investment in so-called *intangible* assets increasing. This leads to a growing role of what people call knowledge-based capital. This knowledge-based capital is of course closely related to the third source of economic growth, the improvement of labour productivity. We all know that we need to invest in knowledge to become more productive.

What is knowledge-based capital? It is not the machinery that we use: no trucks, no buildings, not equipment. If it is not all of that, I need to explain what it is and can, on the way, illustrate how the University of Groningen contributes. First, knowledge-based capital is computerized information: software and databases for instance. At our university we are leading in the field of extremely large datasets. We have experience in the fields of astronomy, LOFAR, in medical science, Lifelines, and we will start a project on energy, called Energysense. How to handle, store, access and use big data is really important. Secondly, knowledge-based capital is innovative property: patents, copyrights, designs, trademarks. Here in Groningen we invest in knowledge for smart industries. We expand our efforts in the fields of engineering and life sciences for instance. Thirdly, knowledge-based capital consists of economic competencies: brand equity, firm-specific human capital, networks of people and

institutions and organisational know-how. The University of Groningen contributes to many aspects via its projects in sustainable society and digital humanities.

So, now we know what Knowledge-based capital is and roughly spoken illustrated that our university works in all its subfields, it is necessary to indicate its importance. It is by now well established that investment in knowledge-based capital is strongly correlated with economic growth. Countries with large stocks of knowledge-based capital do have higher income per capita. From an international perspective, unfortunately, the Netherlands takes a middle position: we can do far better. This implies that both private and public investment in knowledge-based capital have to increase.

That's why Dutch universities and the employer organization VNO-NCW propose to invest in knowledge-based capital and will present an investment plan for the digital society. This plan comes on top of the recently developed Dutch National Research Agenda. VNO-NCW, MKB-Nederland and LTO Nederland jointly propose a new national investment plan called *NL Next Level*. Universities join these ideas and welcome the more intensive contacts with private corporations. So both in the political process and in day-to-day practice the academic and corporate world cooperate and join forces. In this respect, the University of Groningen is proud to announce that one of our professors, Iris Vis of the Faculty of Economics and Business, is appointed per September this year as Dean of Industry Relations. Having good relations with industry is of extreme importance, so on behalf of the University Board: Iris: good luck!

The digital society is key and it is so interrelated with knowledge-based capital and the Netherlands can benefit because of a wide digital literacy and Internet coverage. And we do hope that in the near future more public spending in R&D can be aligned with increases in private expenditures in the same class. It benefits society, it benefits economic prosperity, it benefits employment, it benefits welfare.

Let's have a closer look at private and public investment in knowledge-based capital. Private or corporate R&D-spending is stimulated by three arguments. First, it is competition. Firms experiencing a large degree of competitive pressure will spend more on R&D. Firms facing some protection, on the contrary, will try to shield off their knowledge-based capital, and reap the profits. Secondly, firms able to keep shareholder power at a distance, invest more in R&D. If shareholders can put pressure on management to divert profits into dividends, retained earnings are too low to invest in risky R&D. Thirdly, firm investment in R&D responds to simple tax credits. Lowering the cost of capital can lower the threshold and provide incentives to increase risky investment in R&D. This is where the government really can help to stimulate private R&D investment.

Public investment in knowledge-based capital needs a government that is convinced of the importance of this type of expenditure. Countries like Korea, Singapore, and closer to home, Scandinavian countries and Germany for instance, do have a strong belief in public investment in R&D. The Dutch government seems to bet on the fact

that we are more of a small open economy with a strong focus on services instead of manufacturing industry and the fact that R&D-investment by neighboring countries will spill-over. To some extent this is true, but we all know that the manufacturing industry is at the core of economic development and that freeriding on foreign investment does not make you popular or leading. And finally, we know that the major upward shifts in employment come from the creation of new firms, no matter their size (this is another badly understood empirical fact: the age of the firm matters to growth in employment, not the size!). So an improvement of entrepreneurial attitude benefits society. Public expenditures should have a focus on this. And this is why we need more investment in knowledge-based capital.

Once we embrace the investment plan for the digital society, public and private investments can be complementary. Let me conclude this item by stating that it is for the future of our country, our province, our city and our university. We should invest in smart technologies to support healthy ageing, to support sustainable energy usage and to create sustainable societies. The City of Groningen owns all prerequisites to become a really smart city. Our university can be at the core of such a development, here for the City, for the region, for our country, for Europe and the World.

Today you will probably hear and read more about this issue in the press: and here I conclude my contribution to the discussion on investing in the digital society.