Our Hosts from SUNY and OECD,

Leaders of Higher Education,

Friends and Skeptics of Internationalization,

Dear Colleagues and Guests,

It is my distinct pleasure and honour to be here this morning addressing a distinguished group of academics, administrators and professionals who think about, practice and shape the dynamics of internationalization in higher education.

Given the lagged but deep and pervasive impact of education, internationalization in higher education is a lead indicator of changes to come in the world. No doubt, many will discuss, in a decade or two, internationalization as an ex-post factor to explain changes in our educational structures, in our economies, in our politics, even in our values. The remarkable quality of this conference is that we are here to think about and make sense of internationalization as it unfolds. Although the potential repercussions of internationalization in higher education are well-recognized in this room, I don't think the issue generates sufficient systemic interest and debate among the cognoscenti of the globalization agenda.

So let me begin by extending heartfelt congratulations to OECD and SUNY for taking the lead and organizing this event. I look forward to gaining insights that I can carry on to debates that are seemingly unrelated but actually critically dependent on the dynamics of higher education.

Before I share a few thoughts of my own with you, let me briefly tell you about myself both as a disclaimer and to frame the relevance of my comments.

I am afraid when you see in my bio that I am currently running a global affairs organization, you would expect me to talk more about issues like Iran, Syria, energy security, EU crisis and the like rather than higher education.

I have to confess I do talk about those issues most of the time.

So what can I contribute to a discussion on higher education especially in the presence of such vast experience that is in this room?

I thought about that myself and was somewhat concerned when I received the invitation kindly extended by the organizers. I was hesitant to take the challenge on but I did take the risk and here I am.

I took the risk because I think global education is one of the understated but key agenda items of globalization and I think it is a vast, entangled systems problem. Dealing with entangled systems problems is something that I do and we do at my institution. Internationalization of higher education is and should be a part of any discussion of long-term global dynamics. However, I should be very clear outset that the views I share here are my own and do not necessarily represent the views of GRF.

Then I realized that I have been drawn into higher education internationalization over and over again in the last ten years without consciously thinking about it. I was the senior advisor to the Rector of ITU, Turkey's oldest technical university. I was heavily involved in ITU's first engagement with FP6, in countless inter-university agreements, in launching a graduate program cooperating with two leading US universities and last but not least in shaping the joint degree program with SUNY. I even recalled a long meeting with Admiral Craine, the first President of SUNY's Levin

Center to talk about cross-border collaboration. At the time SUNY was embarking on this visionary project and planning to start activities in this very building. Now here I am in that building talking about internationalization. If life has hidden patterns, then I think SUNY and internationalization in higher education are strangely interlinked in my life. Given this beautiful building and this great institution, I can be only grateful for such serendipity.

I was then involved as an advisor in setting up a Turkish university aided by a US university which did not come to fruition. I invested a lot of time in establishing a leading university's presence in Turkey which did come to fruition last year.

So it seems without consciously recognizing it, I have been an agent of higher education internationalization in Turkey for over a decade.

But most importantly, as I prepared for and thought about this speech, I had another aha-moment, as they say. More than an agent, I am actually quite a stylized product or output of international higher education. It dawned on me that my human capital has been moved across and shaped in three countries. I am a product of internationalization who then turned around and became an agent of internationalization.

What I can, hopefully, offer to you is sufficient prior engagement with and understanding of internationalization combined with some expertise in other global dynamics that may, just may, generate a few insights for our discussions today and tomorrow. Let me once again emphasize that I am truly humbled by the experience in this room as I make my remarks.

Dear Guests,

These days it is customary to start discussions about the future, talking about uncertainty and complexity. I don't think that necessarily helps the debate. It is important to think about what we know rather than talking about the impossibility of knowing. So let me make an attempt by proposing what I think we know.

What are some of the trends we know about global higher education?

Expansion of the knowledge economy and growing middle class in many developing nations create a forceful demand for tertiary education. So there is the global massification of education and it looks like we have a long way to go before we reach saturation, especially in regions with the expected youth bulge like South Asia (where enrolment is still less than half of world average), sub-Saharan Africa (still less than quarter of world average) and the Arab world.

It is not only the increase in youth population and climbing enrolment rates around the world that is driving the demand. The traditional age-group for higher education is also broadening. The demand from mature students for higher education is growing in many parts of the world. So, overall global demand for higher education is on the rise due to a combination of strong tail-winds. That is likely to be a lasting trend for some time. There is something we probably know!

Secondly, confronted with this rapidly growing demand, the financial resources of the states and the capacity of existing institutions are proving inadequate. There is a growing need for private provision or funding in global higher education to absorb the demand which is bringing more private players into higher education. They are taking part domestically and internationally in higher education as a commercial enterprise. The trend of increasing private sector involvement is also likely to be a lasting trend given the range of demands on the public purse. Another trend we seem to know with some certainty!

That brings me to a third point which is that the high demand for and the private provision of education are creating new dynamics for both domestic and international education. The international student numbers are increasing in absolute numbers. However, that trend should be put in perspective. The ratio of international students in the total tertiary student population is relatively small and stable. Only 1.8 students out of 100 higher education students is receiving instruction in another country. 98.2 students are still staying home every year. The third trend is that internationalization is increasing in absolute numbers but not necessarily in percentages. Similarly there is growth in faculty mobility but a vast majority continues their research work in their home countries.

So very broadly speaking there are fundamental forces at work in global tertiary education in terms of higher demand and in terms of higher private sector involvement. Internationalization has a smaller "numbers" impact compared to these broader tectonic shifts.

Significance of internationalization stems from its impact on facilitating and forcing broader change, allowing experimentation and cross-pollination of higher education practices across countries. The impact is more about creating new mechanisms, models and combinations in higher education than about sheer numbers. It is a key agent of change and not the change itself.

Having drawn a very crude picture, I now want to pose three questions:

- 1. Will higher education be commodified as a result of these trends and what will determine the limits to commodification?
- 2. How will commodification change the traditional institutions and mechanisms of higher education? Will that lead to more diversity or uniformity?
- 3. Can and should governments have a role in this evolution? How will their involvement impact the process? Will we end up with plural globalism in higher education?

Each one of those questions deserves a special treatment on its own, so I can only provide a sketch of my answers.

In addressing these questions let me start with a more basic issue. What is the appropriate paradigm to think about education? It is quite common to think of it in trade terminology, as trade of services. I have never felt comfortable with that characterization, not because I think markets and education should be kept apart, but because education seems different from any item of trade I know.

For example, you can't buy education only with money, you also have to pay with years of your time, the scarcest asset you have. That is an unusual payment requirement.

Education has impact on your productivity, so it is somewhat like a capital good. But unlike capital goods, you can't sell it, you can't even get rid of it for free, or you can't really modify it with any precision. The education you get is with you forever whether you like it or not. Imagine a machine in a factory that once you buy it you have to use it all the time until the factory closes down. It is a strange capital good, not a traditional one.

Is it like an experience good, like health services? I don't think that is a good fit either, because the productivity implications are quite different.

So, I don't think the trade paradigm captures the qualities of higher education in its idealized form. I think a nonmarket exchange within the confines of a partnership is a much more appropriate analogy in describing, at least some segments of, higher education. My own relation with the universities I have attended feels more like a non-market long-term relationship where the university has become a stakeholder in my career.

The university is more like a venture capitalist that invests and becomes a partner in the human capital of many students hoping that some of them will prosper and contribute to the institution's social standing, reputation as well as endowment. The student, on the other hand, is the entrepreneur that makes decisions about the key asset, her human capital. She accepts the university as a partner in her human capital, allows the university to become a part of the management team during educational years and then allows it to remain a passive stakeholder. She benefits from

the cache and the network of her university during her career. Not knowing the career opportunities she will face, she wishes to have a broad legitimation and seal of approval from a reputable investor in her human capital, the university.

In economics terminology, the stylized higher education in our minds feels much closer to a non-market long-term partnership than a market trade.

Under what conditions would that partnership relation turn to a market trade? When would the university not want to be a shareholder and the student not want to take the university as a long-term partner?

Partnership entanglement makes sense when there is uncertainty. When the skill is clearly defined, the expected benefit from the skill transfer during education is certain, and the skill transfer is easily achieved, the need for the partnership disappears. When you can learn a well-defined skill set that has a well-defined price in the professional marketplace, then a market trade with the university becomes the more appropriate analogy.

Learning a computer language that will boost your salary by a pre-defined amount does not require a partnership relation, it is a market trade. But if you want to be among the technology pioneers or academic leaders or social innovators in your society, the goal is so broad and the link between educational content and the goal is so vague that the market trade paradigm does not make sense, a long-term partnership is a better fit.

So to the extent that the value-added of a skill is narrowly defined and the link between educational content and that skill is clear, the trade model makes sense. As that clarity is lost, I think the trade model gives way to the partnership model.

What does that distinction tell us for the future of higher education? Will we have a demand for skills that are clearly defined, imparted and priced like "smart phone applications" or will we have a demand for less defined, more creative and ambiguous "entrepreneurial" skills in the broad sense of that word?

It is tempting to say that creative jobs will increase and the partnership model will be vindicated. But I suspect as the knowledge economy expands, most of its steps will be formalized and reduced to routines. In a recent exchange, I learned that financial analysts based in London increasingly rely on their assistants in India to do the spreadsheet work. The spreadsheet competence is separated from the analytic judgment competence. We did not have that when I was in banking, I had to undertake every stage of the work.

As the knowledge economy expands and specialization takes hold, commodity skills and non-commodity skills will increase at the same time. Imparting the former skills will be akin to market trades, and the latter to partnerships.

The relative growth of the demand for commodity and non-commodity skills will drive much of the change in higher education, domestically and internationally. How the knowledge economy will evolve and the expected trajectory of its skill demands is a whole other discussion for another occasion. I won't get into that today.

Nevertheless, I believe the evolution of the knowledge economy is the key determinant of changes to come in higher education. The composition of the new economy's skill demands will set the limit on commodification of higher education.

That answers my first question about the limits of commodification in higher education.

The second question I posed was about the impact of commodification on traditional structures of education? Once a product, a skill becomes well-defined and easily tradable, private structures will seek cost-effective ways to deliver the skill in demand.

The fundamental dynamic behind the market's restless effort to deliver commodity skills is likely to be an unbundling and rebundling of existing institutional structures and methods, to the extent that the governments allow it. We have probably entered an era where present structures will be severely tested by market experimentation to find the most profitable models.

Already the current bundling of research and teaching, undergraduate and graduate education, teaching and examination are being tested and that dynamic is likely to continue in every dimension of higher education. Similarly, time-related constraints on education are also ripe for experimentation. Mature students are likely to demand part-time, modular education structured at their own pace.

Unbundling and rebundling by the markets to find the financially sustainable institutions and ways to deliver commodity skills can be a transformative force. Let me step back and clarify myself at this point. I am not making a value judgment about the desirability of this transformation but just trying to sketch how I model the anticipated change.

If such experimentation is given free rein by the authorities, should we expect diversity or uniformity as the long-term outcome? As experimentation is a dynamic process and as the demands of the knowledge economy will evolve continuously, I don't think we will reach a new steady state of higher education institutions. In that sense, I suspect forces of market change will feed diversity on a sustained basis.

However, fundamental factors that will drive profitability like geographic concentration of students or the concentration of commodity skills in certain disciplines are likely to generate uniformity in certain areas.

What is the role of internationalization in this process? Well, internationalization may provide the requisite regulatory opening for market experimentation with different models. However, real impact will take place if some of these experiments are adopted in national structures where the bulk of higher education takes place. Internationalization can provide the crucial testing ground, national acceptance will be the key determinant for impact.

That ties into my final question about the ability and willingness of national governments to resist the power of skill commodification in the knowledge economy and private experimentation in shaping higher education.

With respect to the governments' ability to resist, I think the competence to resist is still available. An overwhelming share of higher education is still domestic and the governments maintain significant financial and/or regulatory control. Given the need for quality control and accreditation, and the costs of student mobility, their regulatory power is likely to be effective for a long time to come.

However, their actual willingness to resist commodification of skills and reshaping of institutions is another matter. Extensive use of regulatory authority to uphold social values, traditions and quality in higher education is likely to slow down the pace of higher education massification. However, that may not be politically feasible given the massive increase in demand for higher education across the world. Given the fiscal constraints and the public demand for higher education, the governments are likely to be constrained by political considerations in forestalling market forces in higher education.

Therefore, for the authorities, the practical trade-off is between the public's demand for access to education and the values of higher education protected through regulation.

That balance is likely to vary from country to country and the pressures of massification will be critical in shaping that variation.

As the European countries are relatively saturated markets in higher education demand, they are likely to adopt new models more conservatively and probably in high-level niche areas. US, in its concern for its stalled enrolment rates, may be more flexible with new structures to bring down costs. China, under pressure of massification but increasingly concerned with quality may pursue a two-tier strategy. Global pluralism may well be the outcome.

Dear Participants, Dear Colleagues,

My basic narrative is that massification in higher education and private involvement are forceful drivers of change, balanced and restrained by deeply entrenched national goals and concerns related to higher education. Internationalization is the key agent of experimentation and cross- pollination in that transformation but its impact in terms of sheer numbers is likely to remain limited in the near term.

With respect to the nature of the transformation, the evolution of the knowledge economy and the composition of its skill demands will be the determining factor. The relative demand for commodified skills and entrepreneurial, creative skills will shape the landscape of higher education.

The formulation of higher education institutions as traders in skill markets versus as long-term partners in the success of their graduates will mirror the skill composition of the ever-evolving knowledge economy.

Having spent many many years of blissful learning, thinking and teaching in great institutes of higher education in three countries, I can only hope that we will be creative enough to maintain the idealized higher education model where the institutions remain committed partners in the unpredictable accomplishments of their graduates.

Admittedly, there are strong demographic and economic headwinds on that path to engaged, partnership model of education for everyone. It will take the motivation, determination and creativity of experts, leaders, shapers of higher education to overcome those headwinds.

Fortunately, today I am in the company of such leaders and I am encouraged about our future.

I thank the organizers for inviting me today and I look forward to learning from our conversations in the next two days.

Thank you very much for your patience and attention.