

THE LONG DIVIDE

Finnish-U.S. Mobility and Business Studies

Dan Steinbock

September, 2005

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ABSTRACT

Unlike other Nordic countries, Finland is a relative latecomer in terms of Finnish-U.S. exchange. In Scandinavian countries, these exchanges began around 1910s; in Finland, only in the late 1950s. In Finland, too, the exchange had to be primarily 'cultural' and steer away from an emphasis on business education and research, due to political constraints. Until World War II, Germany retained its position as the most important destination for scientific and travel destination. In addition to the Fulbright program, commencing in 1945, Finnish and American scholars have obtained funds from a fair number of other sources to finance their trips to each other's country. Organized exchanges between U.S. and Finnish institutes of higher learning were consolidated during the 1960s. The U.S. influence on social sciences and various tech disciplines was strongest in the 1950s and weakest in the 1970s.

During the past 10-15 years, Finland's role in European integration has brought about a view that the country is a natural part of continental Europe. Yet, it is the Nordic heritage and the Anglo-Saxon cultural tradition that dominate the Finnish mobility. Furthermore, these mobility trends do not reflect appropriately the critical role of Finland's major trading partners, such as Germany, Russia, the emerging markets, and particularly the United States.

It is not just geography, but Finland's political insularity through the Cold War that explains the relatively low number of Finns in exchange programs between Finnish and U.S. universities, as well as the role of Finnish students and scholars, particularly business researchers, in programs supported by the Institute of International Education (IIE), American-Scandinavian Foundation (ASF), the Fulbright Program, and the Foundation for Economic Education (LSR).

The specter of the Cold War era continues to cast a shadow on Finnish mobility trends. The Finnish-U.S. exchange in higher education and research has been gradually 'normalized' only after the mid-1980s, as reflected by the initiation of scientific and technological cooperation agreements. Still, exchange remains marginal, even after the collapse of the Soviet Union and the transition to the innovation-driven economy.

During the factor economy (1860s-1940s), the U.S. Finnish exchange was at best nascent, at worst absent. During the investment economy (1950s-1980s), this absence was forced by the special relationship between Finland and the Soviet Union. During the innovation economy (1990s-present), the momentum of exchange programs is in Europe. As a result, Finnish-U.S. exchange suffers from a 'triple whammy'. In the absence of substantial reforms, the negative consequences are likely to accelerate with economic globalization.

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Additionally, I owe a gratitude to several Finns who were willing to take time to respond to questions relating to the issues of Finnish-U.S. mobility, including President Martti Ahtisaari, Academician Erik Allardt at the Department of Sociology of the Helsinki University, Managing Director Kari Asp of the Economic Education Foundation (LSR), industrialist Georg Ehrnrooth, Minister Max Jakobson, Terhi Mölsä, executive director of FUSEEC (Finland-U.S. Educational Exchange Commission, also known as the Fulbright Center for Finnish-American Academic Exchanges), former executive director of FUSEEC William Copeland, Rector Tapio Reponen of the Turku School of Economics, Executive Director Laura Noreila-Manninen and Chairman Martin Saarikangas of the League of Finnish-American Societies, Professor Pekka Tarjanne, former Secretary General of ITU (International Telecommunications Union), as well as Robert I. Weisberg, Deputy Chief of Mission and several other officials of the U.S. Embassy in Finland.

I take responsibility for the conclusions of the study, which are mine alone.

Dan Steinbock
Director
FCIBER

FOREWORD

Strengthening business know-how is a significant development challenge to the Finnish national innovation system, as stated by the Science and Technology Policy Council (2003). In the past few years, various measures have been taken to strengthen and develop Finnish business sciences, including the launch of the Finnish Center of International Business Education and Research (FCIBER) in New York City. Supported by the Academy of Finland, the Foundation for Economic Education (Liikesivistysrahasto), and the Finnish National Fund for Research and Development (Sitra), the FCIBER is led by Director Dan Steinbock in New York City.

The mission of the FCIBER is to serve as a catalyst in the development of Finnish business sciences and related disciplines (including law, social sciences and humanities), which are rapidly internationalizing worldwide. In February 2004, the Academy released Dr. Steinbock's *Researcher Mobility, Finnish Business Know-How and the United States*. In May 2005, the Academy released *U.S. Business Schools: Origins, Rankings, Prospects* by the same author. The present publication, *The Long Divide: Finnish-U.S. Mobility and Business Studies*, is the third FCIBER publication.

The most popular fields of study for international students in the U.S. are business and management (19%), engineering (17%) and mathematics and computer sciences (12%). As documented by the recent evaluation report (**Box 0-1**), internationalization of Finnish business disciplines has proved particularly difficult. This study has been effort to understand why internationalization has been so challenging in the 'world's most competitive economy,' as reflected by Finnish-U.S. mobility. The study also argues that the problems are structural and cannot be resolved without substantial reforms.

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Graybar Building, New York City
July 20, 2005

Box 0.1 Got a Ph.D? Don't Travel

The dependence on social networks for career opportunities in the academic system has important consequences. It represents in particular a significant obstacle to the internationalization of recently graduated Finnish PhDs. Post-doctoral appointments in the early years of an academic career can offer great opportunities to gain international experience and exposure. This is a time when individuals could go abroad for several months or even years. However, the current situation makes it difficult in fact, and even in a sense dangerous, to do so. The danger is that if a recently graduated PhD cuts himself or herself off from his or her local contacts and networks after graduation by going abroad, he or she runs the risk of not even being considered the day when a position opens locally. Thus in the current system, mobility at that early stage in the career can mean a risk to longer-term career options.

It is difficult to integrate foreign professors into the system – which could be a good way to push both the research culture in Finnish business studies as well as the internationalization of that community.

Internationalization

Nationally, and in terms of funding, the emphasis could be put on helping graduate students spend time abroad during their studies and on helping departments arrange that.

Create incentives for the participation of graduate students in international conferences, for example (this is already found in a few departments but is not systematic).

Create flexible systems, probably at the institution (and not only national) level, to encourage faculty exchanges (see ideal type description of what is being done in a department).

Source: Research in Business Disciplines in Finland, Evaluation Report, Publications of the Academy of Finland, 2/2005, pp. 28-29, 46.

1 THE TRIPLE WHAMMY

In the aftermath of World War II, American technological leadership was across-the-board dominance. The U.S. lead was apparent in all industries, not simply in 'high-technology.' As many commentators have noted, the leap forward in American high-tech is explained largely by enormous investment in research and development by industry, academic institutions, and government, as well as a significant increase in the number of students in higher education. A large proportion of both government and industrial R&D flowed from the Department of Defense. As a result, U.S. R&D expenditure per person employed in 1960 was two or three times that in Europe. The gap with Japan was far greater. The American lead in higher education was not quite as massive, but significant.¹

In the long catch-up, U.S. trade and investment, particularly technology transfer and related mobility and exchange programs have played a critical role. In Western Europe – and over time in Japan, as well – it was the Marshall Plan that served as the great mechanism for the European recovery, reconstruction and economic rejuvenation.

In the post-World War II era, the “American Century” peaked between the late 1940s and the early 1970s. Despite slow erosion in business and technology leadership, the role of the United States remains relatively strong worldwide. Consequently, visits, periods of study and research or simply networking have provided defining experiences to an entire generation of Finnish corporate, public-sector and academic leaders.

International tension in the post-9/11 world, particularly transatlantic relations, has recently contributed to the decline of foreign students and researchers in the U.S. (**Box 1.1**). In the long term, European integration and the emerging role of China and India are bound to challenge the relative superiority of the U.S. business and economic power.

Still, the United States continues to play a dominant role in the worldwide economy. In the most recent Global 500 by the Financial Times, the United States has 219 companies (with a market value of \$9,4378 billion), against 33 by UK (\$1,608 billion), and 43 by Japan (\$1,314 billion). Hong Kong has eight companies (\$224 million), South Korea six (150 million), Taiwan 5 (\$105 million), and Singapore 3 (\$53 million). India has five companies (\$90 million) – mainland China has none. From the standpoint of worldwide R&D, multinational corporations, business schools and technology universities, the United States may well represent almost half of the worldwide volume.²

Unlike other Nordic countries, Finland is a relative latecomer in terms of Finnish-U.S. exchange. In Scandinavian countries, these exchanges began around 1910s; in Finland, only in the late 1950s. In Finland, too, the exchange had to be primarily 'cultural' and steer away from an emphasis on business education and research, due to political constraints.

Box 1.1 Globalizing Competition for the \$13 Billion Industry

U.S. Slips

American universities, which for half a century have attracted the world's best and brightest students with little effort, are suddenly facing intense competition as higher education undergoes rapid globalization.

The European Union, moving methodically to compete with American universities, is streamlining the continent's higher education system and offering American-style degree programs taught in English. Britain, Australia and New Zealand are aggressively recruiting foreign students, as are Asian centers like Taiwan and Hong Kong. And China, which has declared that transforming 100 universities into world-class research institutions is a national priority, is persuading top Chinese scholars to return home from American universities.

Foreign students contribute \$13 billion to the American economy annually. But this year brought clear signs that the United States' overwhelming dominance of international higher education may be ending. Foreign applications to American graduate schools declined 28 percent this year. Actual foreign graduate student enrollments dropped 6 percent. Enrollments of all foreign students, in undergraduate, graduate and postdoctoral programs, fell for the first time in three decades in an annual census released this fall. Meanwhile, university enrollments have been surging in England, Germany and other countries.

Some of the American decline, experts agree, is due to post-Sept. 11 delays in processing student visas, which have discouraged thousands of students, not only from the Middle East but also from dozens of other nations, from enrolling in the United States. American educators and even some foreign ones say the visa difficulties are helping foreign schools increase their share of the market.

State Dept. Relaxes Visa Rules

Responding to concerns that onerous visa requirements are discouraging foreign students and scientists from coming to the United States, the State Department has extended the time many of them can remain before renewing security clearances. The clearance is required for foreigners working in areas the government deems "sensitive." Fields like chemistry, engineering and pharmacology can be in that category.

The change will lengthen the validity of the clearance to up to four years for students, two for working scientists, making it easier to remain in the United States for the duration of work or study programs. Until now, they had to reapply for clearance each year. The State Department consulted with the Department of Homeland Security before granting the extension.

The security clearance program, known as Visas Mantis, was established in 1998 to prevent scientists from illegally transferring technology out of the country. After the Sept. 11 attacks, the caseload increased and the process became more time-consuming. Several of those who carried out the Sept. 11 hijackings had been issued student visas.

Sources: Sam Dillon (2004), "U.S. Slips in Attracting the World's Best Students," New York Times, December 21, 2004; Kristen A. Lee (2005), "State Dept. Relaxes Visa Rules for Some Scientists and Students," New York Times, February 14, 2005.

Stages of Economic Development

As evidenced by the growing literature on clusters and national competitive advantage, successful economic development is based on successive upgrading. It occurs as a nation's business environment evolves to support and encourage increasingly sophisticated and productive ways of competing by firms based there.³

Historically, many countries have found the transition to a new stage of development difficult. In Finland, these shifts have been particularly complex and disruptive in kind. In each case, the transition from one stage to another has been quite disruptive.⁴

The factor-driven stage, between 1860s and 1940s, was initiated during a period of intensifying independence struggle, and it peaked with a devastating Civil War and the subsequent interwar period. The transition to the investment-driven stage was precipitated by three devastating wars, reparations, reconstruction, and the settlement of almost half a million Finnish refugees.

The investment-driven stage took place in the postwar era, roughly between the 1950s and 1980s. For analytical purposes, this stage can be sub-divided to the years of the national industrial policy (1950s to 1966), the era of consensus (1966–1981), the era of opening (1980s). During this stage – the peak decades of the Cold War – Finland, a small Nordic country, found itself between Soviet Union and the United States, as well as the Nordic NATO allies.

Finally, the transition to the innovation-driven stage was accompanied by the great hopes attached to the Soviet *perestroika* and *glasnost*, as well as the deregulation and liberalization of several Finnish industries. It was completed by the collapse of Soviet Union, Finnish-Soviet trade, and the severe recession of the early 1990s. With the eclipse of the Cold War and participation in the EU, the innovation-driven stage took off in the 1990s. For analytical purposes, this stage can be sub-divided to the era of transition (1991–2001) and globalization (2000s to the present).

Stages of Finnish-U.S. Mobility

The development of Finnish-U.S. relations and various forms of educational exchanges, including mobility in business education and research, has been

subject to these stages, and the disruptive transitions from one stage of economic development to another.

Factor-Driven Economy. In the agricultural economy, poor harvests meant famine. At the turn of the 19th century, increased agricultural productivity boosted population growth, but, despite the growing urban factory centers, the economy could not absorb the surplus population. From about 1870 to 1920 – during the great migration accompanying the first wave of globalization – some 380,000 people left Finland, more than 90 percent of them for the United States. In 1919, the United States Relief Administration under Herbert Hoover’s leadership came to the rescue. By 1922 industrial production reached the prewar level. In turn, Finland became the only country to remit annual payments on the loan occasioned by the Hoover relief. During these interwar years, mobility and exchange were minimal.

Investment-Driven Economy. During the Cold War, the Finnish-US relationship was a delicate balancing act, especially after Finland missed the Marshall Plan, due to Soviet opposition. Instead, the Agreement establishing the Finnish-Soviet Science and Technology Commission was first signed in 1955.⁵ The Finnish-U.S. exchange had to be primarily ‘cultural’. Moreover, the rise of Finnish radicalism, starting in the mid-1960s, turned a geopolitical fact into a political preference. For a decade or two, ‘profit’ and ‘capitalism’ were not exactly favored terms in the Finnish intellectual environment. At the height of the investment economy, Finland was also challenged by another outflow of migration as unemployment led Finns to migrate to Sweden.

Innovation-Driven Economy. While in theory, the Finnish-U.S. exchange could only take off after the collapse of the Soviet Union and the demise of the Cold War, the first practical steps in these areas were taken during the days of *perestroika* and *glasnost*. S&T cooperation between the United States of America and Finland was initiated on March 22, 1985 (**Box 1.2**). These agreements were amended and extended in the first half of the 1990s and then automatically extended for 5-year periods. Today, Finland and the United States promote S&T cooperation on the basis of mutual benefit, equality, and reciprocity. Unfortunately, these exchanges evolved only in the 1990s, some 30–40 years after comparable programs in Western Europe and Japan.

During the factor-driven economy, the Finns were too poor, and too preoccupied with economic or political survival to benefit from the nascent exchange programs. During the investment economy, the geopolitical exigencies of the Cold War basically undid opportunities for such programs, except for narrow implementation in seemingly neutral fields of ‘pure science’ and ‘pure culture’.

During the ongoing innovation economy, the Finnish economy is one of the wealthiest in the world, and the old geopolitical exigencies no longer prevail. The aftermath of the Cold War coincided with Finland’s participation in the European integration. In other words, when the constraints of exchange flows were finally – after four decades of isolation – eased, the momentum of exchange in Europe turned inward. Instead of the past transcontinental mobility, EU countries invested increasingly on intra-continental education and research. As demonstrated by the

Box 1.2 S&T Cooperation between the United States and Finland (1985-Present)

The first agreement relating to scientific and technological cooperation between the United States of America and Finland was signed on March 22, 1985. It was amended and extended in October 1990, which was superseded by the agreement signed in May 1995. The agreement is automatically extended for 5-year periods. The activities contemplated include exchanges of S&T information, S&T experts, joint seminars and meetings, research projects, and other forms of S&T cooperation. The parties also encourage and facilitate direct contacts and cooperation between government agencies, research centers, and other institutions of the two countries.

By May 2005, there were 30 umbrella U.S. S&T Agreements worldwide that establish bilateral frameworks to facilitate the exchange of scientific results, provide for protection and allocation of intellectual property rights and benefit sharing, facilitate access for researchers, address taxation issues, and respond to the complex set of issues associated with economic development, domestic security and regional stability.

recent debate on 'European competitiveness' and the 'Lisbon Strategy,' the decline in transatlantic cooperation may be most detrimental to the European nations in the long run.

During the factor economy, the U.S. Finnish exchange was at best nascent. During the investment economy, it was constrained by the special relationship between Finland and the Soviet Union. During the innovation economy, the momentum of exchange programs is in Europe. As a result, Finnish-U.S. exchange suffers from a 'triple whammy'.

America's Academic Mecca

Through the 19th century, Finnish scholars sought contacts with the leading experts in their field primarily in Europe. By the late 19th century, Germany, in particular, attracted Finland's future industrialists, including Nokia's founding father Fredrik Idestam. It was only a century later, toward the end of the 20th century, that English became the official language of Nokia (**Box 1.3**). Depending upon the discipline, Germany, France, or England served as the natural focus of these efforts, while contacts with Sweden and Russia were already firmly established.

The American system of schools and public education were of particular interest in Finland, especially to the early participants in the struggle for coeducation in Finland. At the turn of the century, the United States attracted vast numbers of Finnish immigrants. However, international scholarship contacts remained sporadic, despite the migration of a third of a million people from rural Finland, some 10–15 percent of the entire population, to the United States.⁶

Box 1.3 Nokia's Models of Innovation: From Germany to United States

In late spring 1863, Fredrik Idestam finished his studies, received a scholarship and traveled to Germany. Visiting factories in Germany, he happened to travel to Mägdesprung. While this was a scholarly visit, he had an eye for new opportunities. He had heard of Wilhelm Ludwig Lüders, who had created a new process to manufacture pulp, based on the work of Friedrich G. Keller and Heinrich Völter. On May 3, 1863, Idestam, curious about these new innovations, traveled to Lüders' factory, Herzoglich Anhaltliches Eisenhütten Comptoir, and persuaded his local colleagues to illustrate the workings of the mill. As the process engineers introduced the new manufacturing equipment, Lüders heard about the presentation and rushed to the scene. He had spent years designing the new process and had invested significant capital into the new machinery. He had no need to be a gracious host. To Lüders, the uninvited guest was trying to gather information on a proprietary process technology. Lüders threw Idestam out for what he deemed industrial espionage.

Source: Dan Steinbock, *The Nokia Revolution* (New York: Amacom Books 2001). Chapter 1.

With independence, the situation began to shift, though slowly. Along with physicians, Finnish specialists in the natural sciences visited the U.S. during the 1920s. Since the 1920s, Finns have also been recipients of Rockefeller Foundation grants for scientific research, but most of these grantees went to European capitals. The 1930s witnessed another noticeable increase in studies in the United States, especially among physicians.

“Until World War II, Germany retained its position as the most important destination for scientific and travel destination,” notes Marjatta Hietala on the rise of the international contacts of Finnish researchers.

[In postwar Europe], contacts declined very significantly because Central Europe was devastated. Travels to Germany ended almost entirely. Researchers did get invitations to Sweden, which offered good shipping networks to the United States, which now also provided invitations and funding. The United States had taken the leading position worldwide in many sciences... The cutting edge research especially in natural sciences, medicine and technology was focused on the United States.⁷

In 1943, Finland was still at war with the Soviet Union and fighting on the side of Germany as a cobelligerent. As the war reached a turning point, England declared war on Finland. The United States recalled its minister and closed its consulates in Finland. Relations were severely strained with the U.S. That year, Finnish-American Society – the precursor of the League of Finnish-American Societies – was established in Helsinki.

After the war, the conditions were grim, war reparations gobbled resources, and international contacts were few. The United States was now the new world center of

scholarship. In 1945, the Finnish-American Society offered the first four scholarships for study in the United States. Upon his U.S. visit, Professor V.A. Heiskanen of the Helsinki University of Technology proposed to the Finnish Cultural Foundation the establishment of a Finnish-American system of scholarships. The Finnish government supported the project by appropriating funds to the University of Helsinki and other institutions for funding such scholarships. Meanwhile, private foundations and institutions earmarked scholarships for study in the United States.⁸

The Fulbright program commenced in 1946. Finland first participated in 1952. A year later, the first Fulbright professors arrived in Finland from the United States. The agreement between the United States and Finland also included a clause calling for the establishment of a separate U.S. Education Foundation in Finland, which would administer the exchange program, thus finding institutes of higher learning that would host Americans working in the country as Fulbright professors.⁹

Finnish and American scholars have also obtained funds from other sources to finance their trips to each other's country, including the Rockefeller Foundation, the National Institutes of Health, the W.K. Kellogg Foundation (agriculture, forestry, and food production), the Ford Foundation ("leader grants" of the 1950s and early 1960s), as well as Thanks to Scandinavia Foundation, the American-Scandinavian Foundation (which included Finland in its operations in 1950), and the Finlandia Foundation.

Organized exchanges between U.S. and Finnish institutes of higher learning were consolidated during the 1960s, when the postwar generation of Finnish researchers, particularly social scientists (economics political science, and sociology), saw the United States as a kind of academic Mecca, due to a coincidence of history, demographics and geography. Before World War II, the social science teaching positions were few in the Finnish universities. From 1945 to 1969, there was an increase of over 300 percent in the number of professorial chairs in the social sciences (**Box 1.4**).

In Finland as elsewhere in Western Europe, the U.S. influence was strongest in the first postwar decade when the rise of social science coincided with the reconstruction (**Figure 1.1**). The trend has been similar in other social sciences, including business disciplines.¹⁰ In marketing particularly the American influence was obvious both in theory at the business schools and in practice in the business world.¹¹

In the early 1980s, 44 percent of the professors and associate professors at Finnish universities in economics and economic history, and 39 percent in business administration had spent some time at American institutions.¹²

In Finland, the importance of U.S. social science was perhaps most prominent in empirical research methodology. It was only in the 1970s that competition emerged from other countries in terms of the number of grants offered and the interest of prospective grantees. In addition to social sciences, the U.S. influence was particularly strong in various technology disciplines. From the Finnish standpoint, the period during and after World War II led to a fundamental shift in the balance

Box 1.4 American Influences

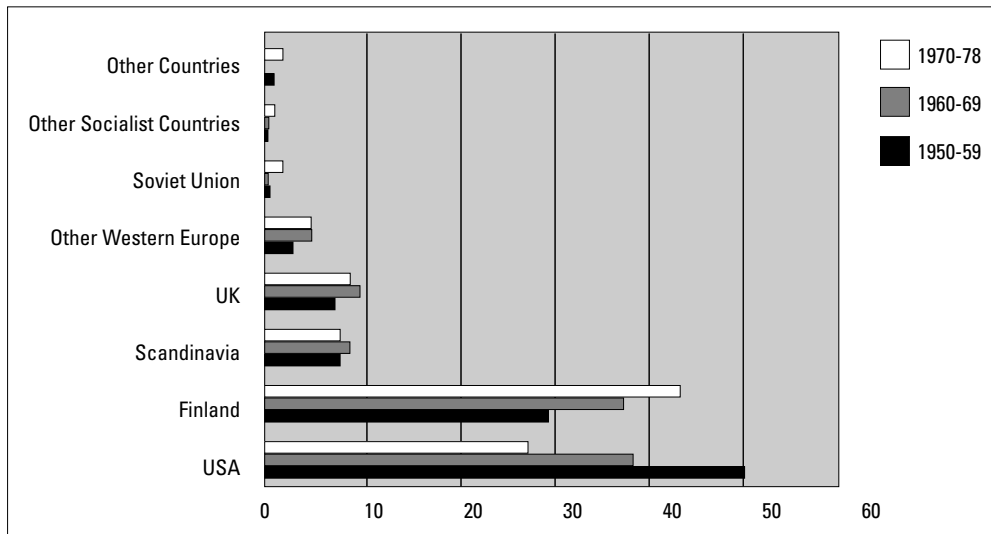
As Erik Allardt and Krister Ståhlberg have commented,

The post-war decades can with reason be labeled the formative years of Finnish social science. In this development the influence of American social science was considerable, to say the least... During the postwar decades most of the major theoretical and methodological influences in economics came from American scholars... The U.S. influence was clearly strongest in the 1950s and weakest in the 1970s... The most clear-cut examples of direct influence on policy measures can be found in the fields of economic policy and marketing.

The American impact on Finnish social science is not internationally unique, but reflects a phenomenon known all over Western Europe.

Source: Allardt, E. and Ståhlberg, K. "Social Sciences", in Copeland, W. et al. (editors), Finnish-American Academic and Professional Exchanges, (Espoo: Weilin+Goos 1983), pp. 49-53.

Figure 1.1 Rise and Decline of U.S. Social and Business Sciences
Citations in Finnish Doctoral Dissertations in Sociology by Country of Origin and Decade (1950-78)



of science and technology between Europe and the United States. The U.S. gained a scientific hegemony that also had a profound impact on S&T in Finland. Comments Jorma Routti,

The prewar ties with European countries were largely broken. Fortunately, new avenues for study and collaboration were opened with American scientists and institutions. These possibilities have greatly accelerated scientific progress in Finland, and in many cases they have developed into lasting collaboration of mutual benefit.¹³

During the 1976 American Bicentennial year, the University of Helsinki established a professorship in American Studies. To some degree, Finnish sources have provided financing for scholarly and professional exchanges, particularly the Academy of Finland. Large private foundations – including the Finnish Cultural Fund, the Wihuri Fund, the Eemil Aaltonen Foundation, the Gyllenberg Foundation, O. Huttunen Foundation and the Sigrid Juselius Foundation – have also supported many Finnish researchers eager to travel to the U.S. for study or research.

Nordic Heritage, Anglo-Saxon Tradition

After the eclipse of the Cold War, and the collapse of Soviet Union, Finland finally joined European integration. In order to compete, Finnish corporations and enterprises – traditionally strong in technology, weaker in marketing – have focused on innovation, due to the few world-class clusters and firms in Finland, and the incessant pressure to stay close to the productivity frontier in other industries, as well.

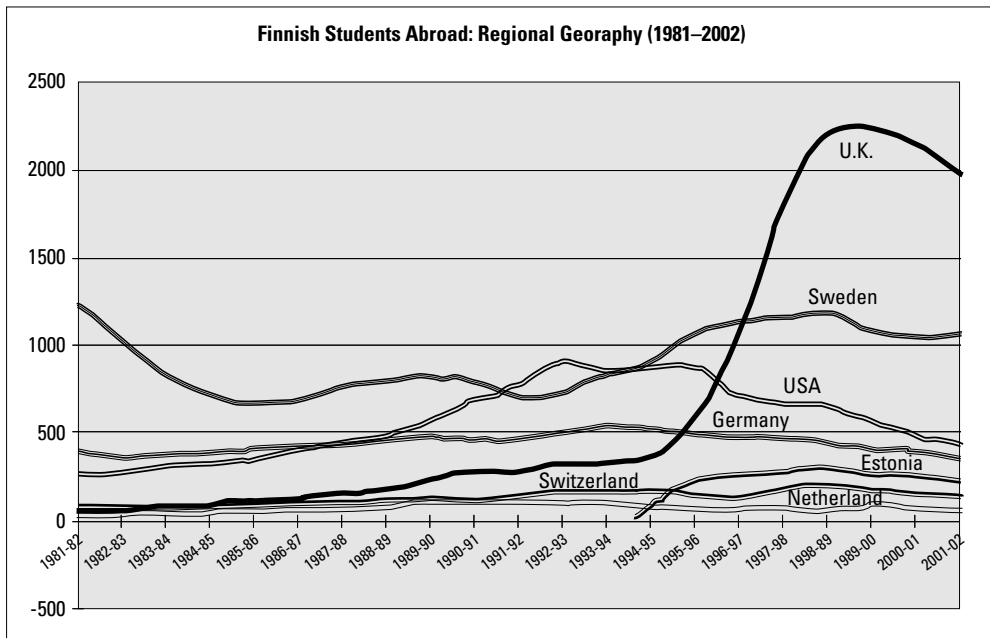
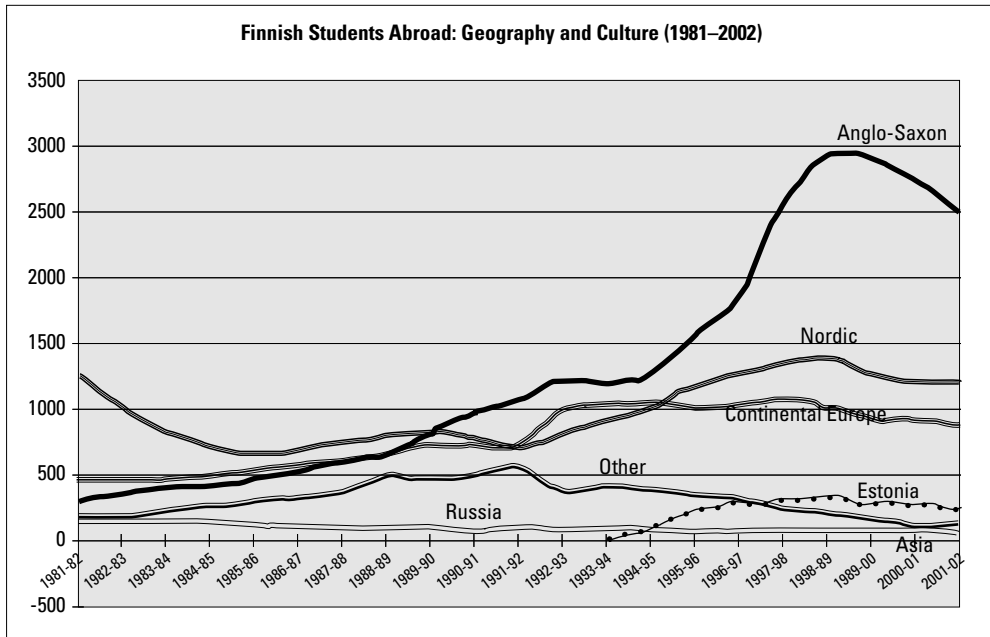
During the past 10-15 years, Finland's role in the European integration has brought about a view that the country is a natural part of continental Europe. If that truly were the case, one would presume that mobility trends would reflect such views. Yet, this is not the case. Take, for instance, Finnish graduate students abroad. In absolute terms, these figures reflect a fraction of the overall student population. In relative terms, many of these elite students have had an important role as Finnish corporate, public-sector, and academic leaders.

The number of Finnish students studying abroad has grown steadily since the late 1980s, at the end of the investment economy. This acceleration was particularly strong in the mid-1990s, with the transition to the innovation economy. At the turn of 2000, the figures decreased, reflecting perhaps the demise of rapid economic growth, the stagnation of the technology sector, slowing European integration, and the leveling off of studying abroad. Furthermore, although the Finnish institutions report 'dramatic growth' through the 1990s, even in 2001 only 2.8 percent of all Finnish university students were studying abroad. This figure is lower than the Nordic average and well behind the European average. It reflects the shallow internationalization of the Finnish society.

At the turn of the 1980s, there were fewer than 2,400 Finnish students abroad; in 2002, this number had more than doubled to almost 5,000 (**Figure 1.2a**). At the turn of the 1980s, most Finnish mobility was focused on the Nordic countries (52 percent), continental Europe came second (20%), followed by the Anglo-Saxon nations– that is, UK, US, Canada and Australia (13%) – and Soviet Union (7%) (**Figure 1.2b**).

By 2002, the role of Nordic mobility had declined dramatically, to a mere fifth (9%), despite the strong position of Sweden. In contrast to the 'Euro hype', the role of continental Europe indicated no growth in mobility. In effect, it was halved (9%). Intriguingly, growth trends were not discernible in the large Euro nations, such as

Figure 1.2 Finnish Students Abroad (1981–2002)



France, Germany or Spain, but in small Euro countries, such as the Netherlands and Switzerland. The role of the Anglo-Saxon nations as mobility targets had more than doubled (35%), whereas that of Estonia exploded (24%).

Finnish Mobility, Trade and High-Tech

Among business students, these trends are even more poignant. During 2001 and 2002, some 64 percent of all Finnish students studying abroad were attracted by Anglo-Saxon countries (primarily UK, US, Ireland and Canada), 24 percent by continental Europe (half of these studied in small rather than large Euro nations), 21 percent by Nordic countries and 2 percent by Estonia.

In terms of countries, UK was most attractive to business students (38%), followed by Sweden (20%), Germany (12%) and the United States (13%).

Do these mobility trends parallel the lead markets of Finnish trade and high-tech (Nokia's major markets as benchmarks)? Some 20-25 years ago, the mobility of Finnish students was very low and concentrated to a few nations: Sweden, Germany, US, UK, France, and Switzerland. Today, mobility is rising, but remains low in international terms and is more fragmented. It is dominated by Anglo-Saxon nations (UK, US), Nordic countries (Sweden, Norway, Denmark), continental European (Germany, Netherlands, France, Italy) and Baltic countries (Estonia) (**Table 1.1**).

The list of leading mobility targets is trailing behind in the case of Germany, and particularly with Russia. The list of major trading partners is reminiscent of the list of major high-tech partners, as reflected by Nokia's key markets. It is dominated by Anglo-Saxon nations (US, UK), followed by continental European nations (Germany, Italy, France, Spain), emerging large growth markets (China, India, Brazil) and critical hubs (United Arab Emirates). Mobility trends lag behind in the case of the United States, which should play a paramount role as a mobility target. The discrepancy is worse with emerging growth markets, particularly China, India, and Brazil.

It is not geography, but Finland's insularity through the Cold War that explains much of the low degree of internationalization. As a target of Finnish mobility, the new role of Germany in the integrating Europe is also less prominent than one might

Table 1.1 Mobility Leaders, Trade Partners, Nokia (Early 1980s–Early 2000s)

| | Mobility Leaders | | Main Trading Partners (2004) | | Nokia (2004) | |
|----|------------------|-------------|------------------------------|-------------|--------------|-------------|
| | 1981–82 | 2001–02 | Exports | Imports | Sales | Personnel |
| 1 | Sweden | UK | Sweden | Germany | USA | Finland |
| 2 | Germany | Sweden | Germany | Russia | UK | USA |
| 3 | USA | USA | Russia | Sweden | Germany | China |
| 4 | UK | Germany | UK | China | China | Germany |
| 5 | France | Estonia | USA | France | UAE | Hungary |
| 6 | Switzerland | Netherlands | Netherlands | USA | India | UK |
| 7 | | France | China | UK | Italy | Brazil |
| 8 | | Italy | France | Netherlands | France | Mexico |
| 9 | | Norway | Italy | Japan | Brazil | Denmark |
| 10 | | Denmark | Norway | Italy | Spain | South Korea |

anticipate. The role of Russia is insignificant in proportion to its future growth. Vital to the high-tech, emerging large markets have been largely ignored by Finnish mobility trends. Most importantly, the growth regions of the transatlantic economy – America’s innovation centers – are poorly reflected by the mobility trends.

Unlike the business schools, Finnish technology universities tend to have exchange contracts with several U.S. business schools. However, some of these are limited to technology transfer. Few schools engage in bilateral contracts because of cost structure. In many departments, it is hard to motivate employees to travel abroad. As many individuals establish themselves quickly in the labor market, there are fewer incentives. On the other hand, as Finnish business and technology executives argue, the experience pays off, as long as the visitors are willing to collaborate and network.

“Some 10-20 years ago, the United States was a natural target country,” observes one interviewee. “Today European countries are perceived as more central in mobility. Many have become more international and European researchers emphasize European issues. Although the United States remains the top country in publications and there remains widespread interest, b-schools tend to seek new target countries for exchange.”¹⁴

Currently, the Finnish-U.S. mobility is stable but relatively low, argue Finnish observers (**Box 1.5**).

Box 1.5 Stable But Low U.S.-Finnish Mobility

“The state of Finnish-U.S. exchange in business education and research is quite stable, but relatively low,” says rector Tapio Reponen. “U.S. is and has been a leading nation in business research and education. Therefore, U.S. universities have been a natural choice for visiting researchers. Recently the role of EU has increased interest into mobility within Union countries.”

From the standpoint of the Turku School of Economics, rector Reponen sees certain strengths and weaknesses in the existing forms of Finnish U.S. mobility in business education and research. The strengths include the following: financing is well organized; there are no cultural barriers; contacts between professors exist; conference participation is active; electronic communication is easy. These strengths go hand in hand with several weaknesses: difficulties in finding contacts to the best U.S. universities; small number of faculty and student exchange; short visiting periods; low degree of long term collaboration.

The opportunities in Finnish-U.S. mobility include combining U.S. research knowledge with close Finnish industry contacts thus creating new findings and innovations. Also, Scandinavian research tradition might add new aspects to U.S. research. The list of potential threats, Reponen suggests, includes EU’s internal research policy; U.S. policy in issuing visas; the increasing role of Asian researchers; opening research and educational markets; brain drain from Europe to U.S.

2 FINNISH-U.S. EXCHANGE

“In the somewhat peripheral and geographically isolated position that Finland found itself in the postwar world, the exchanges with America have proven a vital, perhaps even decisive, ingredient in sustaining the Finnish sense of cultural and ideological identity with western values,” wrote James H. Billington, director of Woodrow Wilson International Center for Scholars, in the early 1980s.¹⁶

American Capitalism as a Political Threat

During the Cold War, the Finnish objective was to maintain good cultural relations with the United States, whose role, in turn, was “to do nothing to shake the precarious equilibrium in the Finnish-Soviet relationship”.¹⁷ Before the popularity, even faddishness of business studies in the late 1980s and 1990s, U.S. business studies were simply too controversial. After all, they promoted American capitalism, which was considered a *political* threat to neutrality in foreign policy, until the demise of communism and the collapse of Soviet Union in 1991.

When Finland joined the European Union, this coincided with the new momentum of the exchange programs in the EU nations. Concurrently, the United States became to be considered a distant, and ‘difficult’ destination. As the Nokia-led boom years were exhausted by the turn of the 2000s, Finland excelled in technology innovation but stumbled in managerial competences and downstream activities, such as marketing and services. It was then that the ‘triple whammy’ of the Cold War era returned to haunt Finnish success.

Exchange Programs between Finnish and U.S. Universities

According to a 2005 survey, Finnish universities had 95 bilateral exchange agreements with 70 American universities. Overlapping exchange programs were few. In average, there were 4-5 exchange partners per university, but variation among the universities was relatively high (**Figure 2.1**).¹⁷ While the exchange partners were located across the United States in 35 different states, Eastern and Northwest states were most prominent. Finnish universities have an exchange partner in almost every state from the great lakes to the East. Michigan was the most popular partner, followed by North Carolina, Ohio, and California. In terms of universities, Michigan Technological University was the most popular one with five Finnish partners. It was followed by Emporia State University, Pittsburg State University, University of California – Berkeley, University of Washington and Virginia Polytechnic Institute and State University.

About half of the 190 students who participate in these exchange programs participate in bilateral exchange programs, more than 20 percent are in multilateral programs, and the rest are ‘free movers’ or use other options, including ASLA-Fulbright and professorial networks. It is more difficult to estimate the number of U.S. exchange students in Finland. According to the study, some 85 American students participate in these programs annually.

Figure 2.1 *Bilateral Exchange Programs: Finnish-U.S. Universities*

- | | | |
|---|--|---|
| <ul style="list-style-type: none"> University of Helsinki - University of California, Berkeley - University of Georgia, Athens - University of Minnesota - University of Montana - Virginia Polytechnic Institute and State University | <ul style="list-style-type: none"> Lappeenranta University of Technology - California State University, Fullerton, College of Business Administration - Michigan Technological University - The University of Delaware | <ul style="list-style-type: none"> - Ohio State University - University of Louisville - University of Washington - Virginia Polytechnic Institute and State University |
| <ul style="list-style-type: none"> Helsinki School of Economics - DePaul University - Emporia State University - Fitchburg State College - Florida Atlantic University - Indiana University - Michigan State University - Northern Illinois University - Ohio Northern University - Pittsburgh State University - Texas Tech University - University of Dayton - University of Florida - University of Nebraska at Omaha - University of North Carolina at Chapel Hill - University of South Carolina - University of Texas at Austin - University of Texas at El Paso - Western Washington University | <ul style="list-style-type: none"> University of Oulu - Central Missouri State University - East Carolina University - Michigan Technological University - Montana State University - State University of New York, Albany - State University of New York, Buffalo - University of Missouri, St. Louis - University of North Carolina, Greensboro - University of North Carolina, Wilmington - University of North Dakota - University of Pittsburgh - Washington College | <ul style="list-style-type: none"> University of Tampere - Michigan Technological University - University of Oregon - University of Texas - Virginia Polytechnic Institute and State University |
| <ul style="list-style-type: none"> University of Joensuu - Ohio Northern University - University of Montana | <ul style="list-style-type: none"> Sibelius Academy - Western Michigan University | <ul style="list-style-type: none"> Theatre Academy - University of Utah - University of North Carolina |
| <ul style="list-style-type: none"> University of Jyväskylä - Pittsburgh State University - University of Wisconsin, Whitewater | <ul style="list-style-type: none"> Swedish School of Economics - Rensselaer Polytechnic Institute - The Lally School of Management and Technology - University of Tulsa, College of Business Administration | <ul style="list-style-type: none"> Helsinki University of Technology - Iowa State University - Michigan Technological University - University of California, Berkeley - University of Delaware, Newark - University of Toledo - University of Virginia - University of Wisconsin, Madison |
| <ul style="list-style-type: none"> University of Kuopio - University of Minnesota | <ul style="list-style-type: none"> University of Art and Design Helsinki - Finlandia University - Northern Arizona University - Ohio State University - Rhode Island School of Design - University of Arizona | <ul style="list-style-type: none"> Turku School of Economics - California State University, Hayward - Emporia State University - Pittsburgh State University - University of California, Berkeley |
| <ul style="list-style-type: none"> Academy of Fine Arts - Carnegie-Mellon University, Art School | <ul style="list-style-type: none"> University of Lapland - East Carolina University - Kent State University - Purdue University - University of Alaska, Fairbanks - University of Georgia - University of Southern Illinois, Carbondale - University of Vermont | <ul style="list-style-type: none"> University of Turku - Humboldt State University - University of Michigan - University of Missouri - University of Washington |
| | <ul style="list-style-type: none"> Tampere University of Technology - Indiana University of Pennsylvania - Michigan Technological University - Murray State University - North Carolina State University | <ul style="list-style-type: none"> University of Vaasa - Emporia State University |
| | | <ul style="list-style-type: none"> Åbo Akademi University - Dauphin Island Sea Lab - Florida Institute of Technology - Fort Lewis College - North Carolina State University, College of Forest Resources - State University of New York, Albany |

Finnish universities participate in half a dozen multilateral exchange programs, including ISEP (International Student Exchange Program), MAUI (Mid-America Universities International), GE4 (Global Education for European Engineers and Entrepreneurs), UNC-EP (The University of North Carolina Exchange Program), PIM (Partnership in International Management). The latter is an international consortium of business schools.

Finnish Students and IIE Programs: Marginal Role

In the era of the national industrial policy, the number of Finnish students trailed well behind that of other Nordic countries. Although the population of Norway is less than half of Sweden's, twice or thrice as many Norwegians took part on the IIE programs annually as Swedes (**Box 2.1**). Although Finland's population is slightly larger than that of Denmark, the number of Finnish students trailed behind those of Denmark through most of this era. The absolute number of students from Iceland was the smallest, but, relative to the population, higher than most Nordic countries. (**Figure 2.2**).

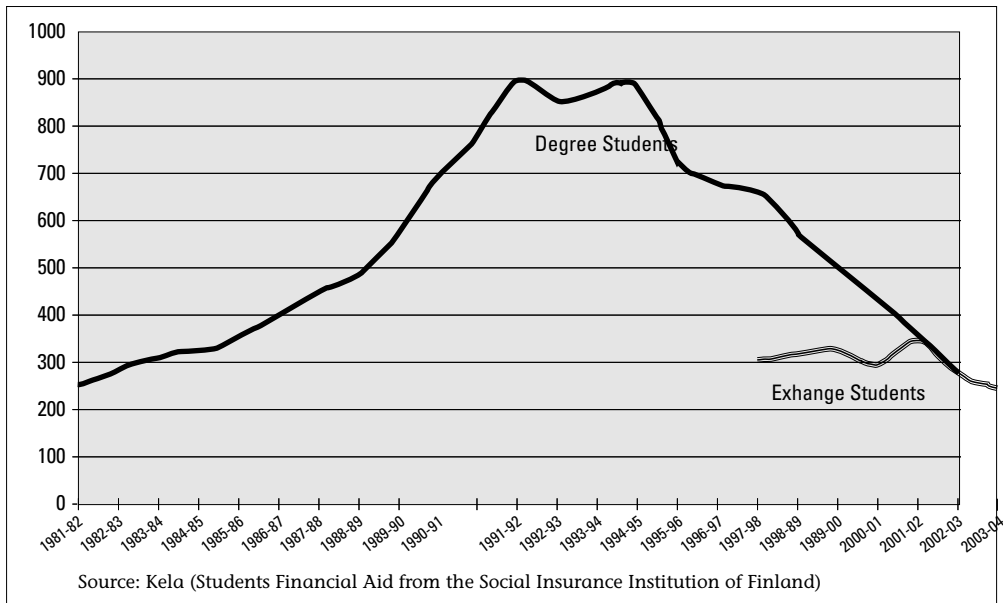
Box 2.1 Role of Institute of International Education (IIE)

IIE was established in 1919, in the aftermath of World War I. The founders believed that there could be no lasting peace without greater understanding between nations; and that international educational exchange formed the strongest basis for fostering such understanding. In the 1920s, IIE began organized student exchanges with several European governments as well as faculty and teacher exchanges, while the government created nonimmigrant student visas, bypassing post-war quotas set in the Immigration Act of 1921. In the 1930s, the Institute assisted the refugees of European Nazism and Fascism. Expanding its activities outside Europe, IIE opened the first exchanges with the Soviet Union and Latin America. In the 1950s, IIE became increasingly involved with assisting the developing world, for the countries of Asia, Africa, and Latin America. In the 1980s, taking advantage of improving relations with Communist governments, IIE developed the U.S.-U.S.S.R. Student Exchange Program and extended its educational advising services in the People's Republic of China. Today, IIE is initiating programs for leaders, managers, professors, and students in formerly Communist countries to learn about market economics and democratic institutions.

In the era of consensus, the number of the Norwegians continued to climb until the 1970s, when Sweden caught up with and surpassed its western neighbor. Through this era, the number of Danes and Finns came quite close to each other.

With the era of opening, the volume of students increased in all Nordic countries. Between 1981 and 1990, the number of Swedes almost doubled from 858 to 1710, whereas that of Norwegians more than doubled from 938 to 2110. Denmark and Finland started from the same base (400–410 respectively), and while both almost doubled their numbers, Finland fell behind Denmark (740–820 respectively).

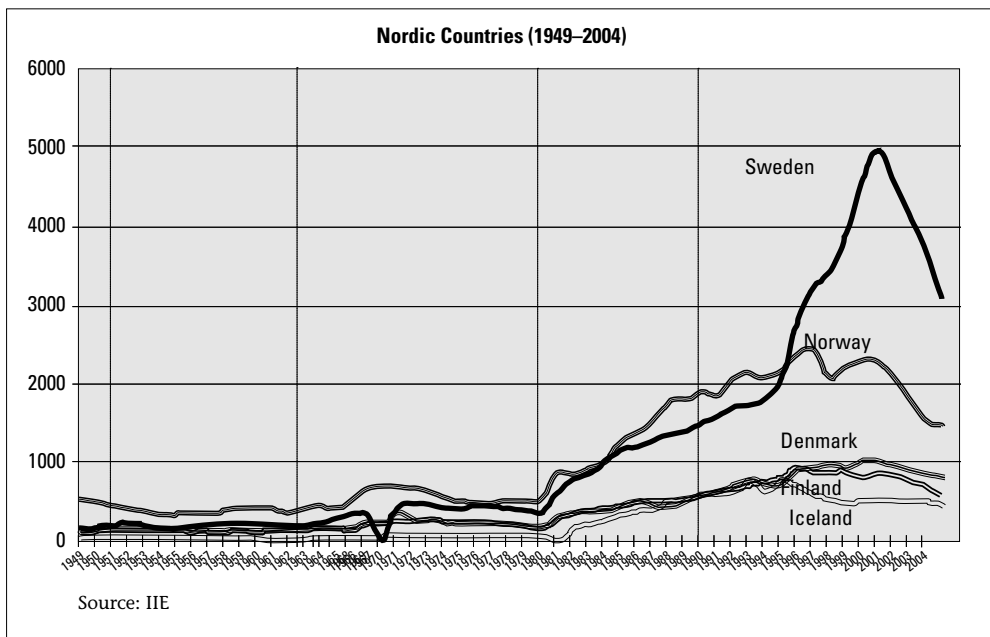
Figure 2.2 Finnish Students in the United States (1981–2003)



Iceland’s numbers more than tripled; it tied with Denmark. That left Finland behind all Nordic countries.

In the 1990s, the growth trend only escalated, until its eclipse and 9/11. Between 1991 and 2000, the number of Swedish students more than doubled from 1,740 to 4,598,

Figure 2.3 International Students: Nordic Countries (1949–2004)

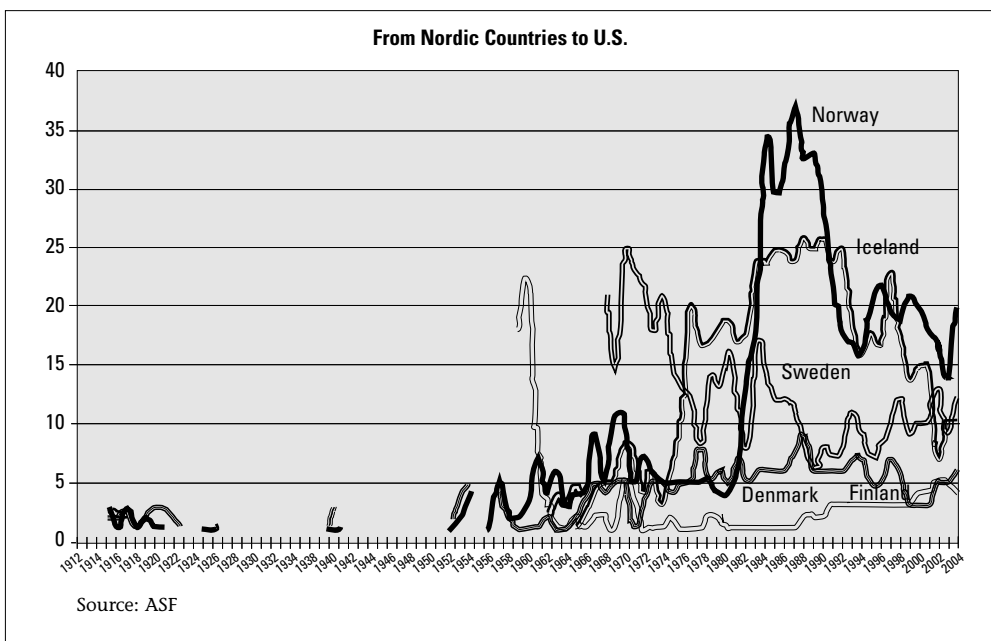


while that of Norwegians varied from 2,100 to 2,500 and the Danes between 800 to 1,100. The number of Finnish students climbed from 740 to some 900. After these peak years, the growth trend was reversed in every Nordic country (**Figure 2.3**).

American-Scandinavian Foundation: Nordic Followers

Headquartered in New York City, the American-Scandinavian Foundation (ASF) is a publicly-supported, non-profit organization that promotes international understanding through educational and cultural exchange between the United States and Denmark, Finland, Iceland, Norway and Sweden. The broad scope of ASF's program of fellowships and grants would not be possible without the Foundation's close and longstanding ties to exchange organizations in the Nordic countries, including the League of Finnish-American Societies (Suomi-Amerikka Yhdistysten Liitto) in Finland (**Figure 2.4, Figure 2.5**).

Figure 2.4 *Students and Scholars: From Nordic Countries to U.S. (1912–2004)*



The Nordic-U.S. migration flows of scholars and students, from the early 1910s to the present, demonstrate several intriguing trends and characteristics.

Finns are latecomers. Swedish, Danish, Norwegian, and even Iceland's scholars joined the exchange flows starting in the early 1910s. The first Finnish group of exchange scholars participated only toward the end of the 1950s, that is, half a century after the first Scandinavians.

Ford plan for leaders. Not only were the Finnish scholars latecomers, initially many were not scholars at all. At the end of the 1950s, 'Ford Foundation Finnish Leaders Grants' enabled Finnish leaders in the fields of communication, arts and

legal professions to visit the U.S. and create contacts with American colleagues, while allowing U.S. leaders to visit Finland for similar exchanges. The effort promoted the privileges of a Marshall Plan–style exchange.

Lowest turnover in Nordic Europe. Almost 3,500 scholars participated in the ASF exchange between 1912 and 1997. Of these, more than third went to or came from Sweden, the next largest exchange volumes were between the U.S. and Norway, and Iceland. The U.S.-Finnish ASF exchange was less than 6 percent of the total. The population of Finland comprises about 20 percent of Nordic Europe. In other words, the role of the Finnish students and scholars has been a fraction – only a third – of what one might anticipate.

Negative balance. The balance of exchange flows has been positive only with Sweden and Denmark, which have received more U.S. scholars than they have sent to the U.S. In contrast, Finland, Norway and Iceland have relatively high imbalances. Unlike Sweden, the largest Scandinavian country with a relatively high international profile, or Denmark, which is physically closest to continental Europe, other Nordic countries – Norway, Iceland, and Finland – are situated in the margins of Europe. Due to their security arrangements with the U.S., Norway and Iceland have had relatively high exchange flows to the U.S. Finland’s geographic insulation coincided with its political exclusion through the Cold War.

Minimal Role of Business Scholars. None of the almost 80 U.S. scholars who visited Finland represented business studies. In turn, only five of the 115 Finnish scholars who studied in the U.S. have been business scholars; less than 5 percent of the total. Through the Cold War, this was ‘politically correct’ in the sense that the exchange programs were often legitimized as ‘cultural exchange.’ After the Cold War, higher relative exchange has been more possible theoretically, but European integration has attracted more scholars to EU nations.

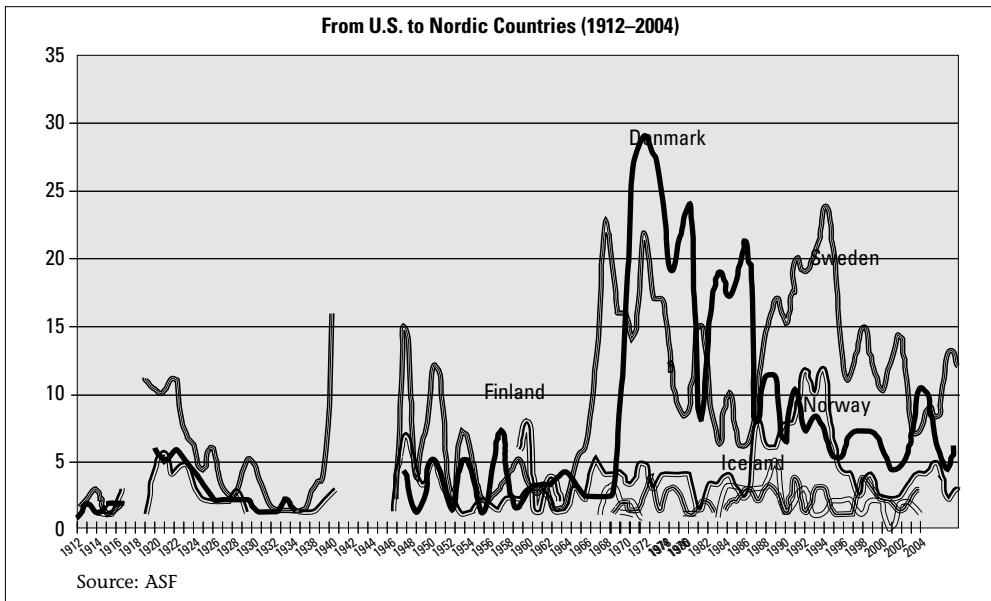
Fulbright Fellows: Focus and Decline

The Fulbright Center is a service organization that specializes in academic exchange between Finland and North America (**Figure 2.6, Figure 2.7**). In addition to administering the ASLA-Fulbright exchange program, the Fulbright Center provides advising and information services on study opportunities in the United States and Canada, while operating a computer-based test center. In Finland, the program is financed in part from a trust fund established in 1976 from Finland’s final repayment of a U.S. loan made in the aftermath of World War I (**Box 2.2**).

Rise and Decline

The first Fulbright professors arrived in Finland from the United States 30 years ago, in 1953. In 1983, the ASLA-Fulbright exchange program between Finland and the United States commemorated its 30th anniversary. By then, the exchange had involved more than 3,200 American and Finnish graduate students, professionals and scholars.¹⁸ Additionally, Finnish sources have provided financing for scholarly and professional exchanges.¹⁹

Figure 2.5 *Students and Scholars: From U.S. to Nordic Countries (1912-2004)*



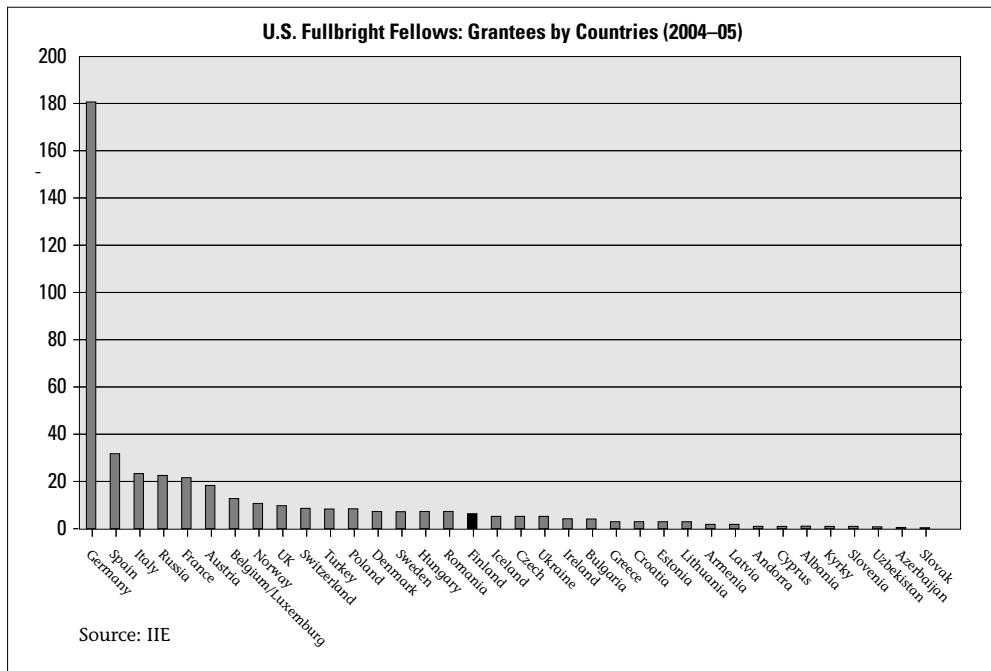
Box 2.2 Origins of the Fulbright Program

The Fulbright Program was established in 1946 under legislation introduced by former Senator J. William Fulbright of Arkansas. Funding for the program was provided by the sales of military surplus left over from World War II. Senator Fulbright's vision was to create a program aimed at promoting mutual understanding in the world by giving students and scholars an opportunity to study in another country and learn to understand its culture and people. The Fulbright Program is the world's largest academic exchange program. Approximately 250,000 students, scholars, and teachers have participated in the Program since its inception more than fifty years ago.

The beginnings of the Fulbright program in Finland trace back to ASLA, an acronym for Amerikan Suomen Lainan Apurahat (America's Loan Grants to Finland). The program has its roots in a loan Finland received from the United States after the World War I, the payments of which Finland met regularly despite the depression and Second World War. By honoring this debt Finland earned enormous goodwill in the international community. In recognition of Finland's commitment, the U.S. Congress voted in 1949 to redirect the loan payments to be used as scholarships for its citizens to come to the United States to study and conduct research. It was thus that the ASLA program was created. The bilateral scholarship system is unique in the history of American scholarship programs. In 1952 Finland joined the Fulbright Program. Today, the Fulbright Center awards grants to some 60 Finnish and American students and professionals annually. It is a non-profit organization funded by the Finnish Ministry of Education, the American and Canadian governments, and a Trust Fund founded by the Finnish and U.S. governments.

Despite the number and variety of these venues, recessions, and cost increases have occasionally placed a heavy burden on Finnish-U.S. scientific cooperation. During the first period of ASLA scholarships (1950–51), there were 40 graduate students and 10 leader grantees in the United States financed from this source. The peak for ASLA scholarships was the early Kennedy era (1962–63), when close to 170 Finnish students and teachers visited the United States on ASLA scholarships. By the early 1980s, the number declined to fewer than 20 scholarships. Furthermore, the Fulbright program has focused primarily on humanists (**Figure 2.6**).²⁰

Figure 2.6 Fullbright Grantees by Countries (2004–2005)



Great Exclusion

What about MBA’s and doctoral programs in business education and research? These segments have not been featured as categories. From the 1950s to the early 1990s, U.S. business was the great invisible in these exchange programs. The tacit exclusion extended even further. Some of the few Finnish scholars who did their MBA or doctoral studies in the United States were often marginalized from the Finnish business education community. The technologists fared better. Of the Finnish scholars who participated in the ASLA-Fulbright programs between the early 1950s and early 1980s, a third were from the University of Helsinki, 12 percent from the University of Turku, 9 percent from the University of Oulu, and 8 percent from the Helsinki University of Technology. The Helsinki, Turku or Swedish School of Economics do not even figure in the statistics.

During the past half a century, the number of Finnish Fulbright scholars specializing in economics has varied from none to seven researchers per year. Many have played

an important role in the Finnish society as well as in the academia, including Raimo Ilaskivi, Otto von Fieandt, Veikko Jääskeläinen, Reino Hjerppe, Rune Stenbacka and Kristian Möller. The peak years occurred with the launch of the program in the first half of the 1950s, in the late 1970s, in the 1980s opening, with the rejuvenation of the economy after the early 1990s, and at the turn of the millennium (**Box 2.3**).

Box 2.3 Finnish-ASLA Fulbright Program

"According to mobility statistics, the number of Finnish students in the United States declined after the EU exchange programs and other opportunities became available to the Finns,' says Terhi Mölsä, Executive Director of FUSEEC (Finland-U.S. Educational Exchange Commission). 'These trend declines do not pertain to the Fulbright Center exchange. The number of the Fulbright applicants have remained pretty much the same during the past years. In some programs, the number of the applicants has actually been growing. Fulbright has always included business students. During the past two years, our undergraduates have been in the Massachusetts Institute of Technology. The Center has also renewed existing collaborations and entered into a number of new partnerships, e.g., with the Centre for International Mobility (CIMO), and VTT Building and Transport."

"An essential characteristic of the Finnish ASLA-Fulbright program is that it does not 'just' offer a scholarship, which, as such, can be quite substantial (in a graduate student program at 28,000 USD per year). It also provides a web that is automatically accessible to those who make it to the program, and support services, which are offered to the scholars, even a year before their U.S. visit."

Foundation for Economic Education (LSR): US Leadership

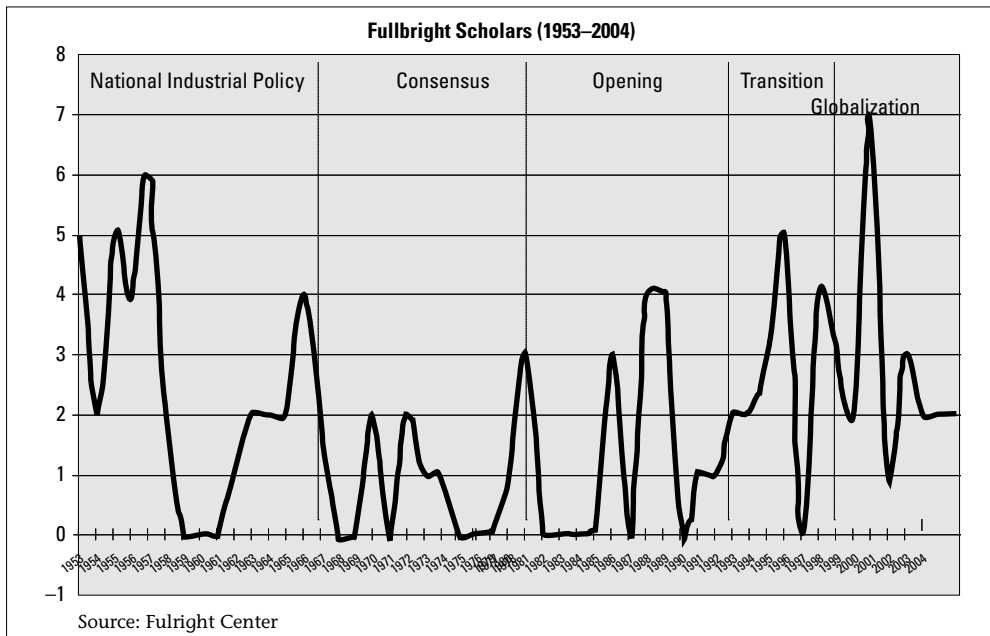
Since 1919, Finnish businessmen have been active in promoting higher business education through the Foundation for Economic Education (*Liikesivistysrahasto*, LSR).²¹ Almost all grants are used for either scientific work or international university studies in the field of business economics. In principle, only Finnish citizens can receive a grant from the Foundation. In case of a longer stay in Finland, citizenship has not been considered an absolute necessity.²² During the era of consensus, the number of Finnish business scholars abroad supported by the LSR was only 2-4 persons per year. Except for a brief spike in 1978, most studied in North America, not in Europe. Those who did study in Europe, used their time mainly in the UK. At the peak year of 1981, *all* of these scholars were in the U.S.

The era of transition witnessed a dramatic rise in the numbers of business scholars studying abroad. This took place in two phases. During the first half of the 1980s, the annual number grew almost fivefold from 4 to 18. After 3-4 years of decline, the era saw a new dramatic spike from 7 to 30. This growth period was reversed with the collapse of Soviet trade and the ensuing severe recession in Finland. Through most of this period, North America remained the most important target country. Europe also attracted a steadily growing number of scholars. At the peak of the era in 1990, more than 74 percent of these scholars were studying in North America and 22 percent

in Europe. During the second half of the 1980s, the US attracted consistently more than any other country, with numbers peaking at 20 scholars in 1990, as against 3-4 in UK/Ireland, and 1 in Nordic countries, France/Benelux, as well as Germany/Switzerland/Austria.

During the era of globalization, the numbers continued to climb, from 15 in 1992 to 31 in 1997. After still another decline, a rejuvenated growth boosted the numbers close to the previous peak in 2004. Now, the composition shifted. In the second half of the 1990s, the number of scholars in North America began to decline, almost halving by the early 2000s. In 2004 the number of scholars in the United States was about the same as in the mid-1980s. Concurrently, Europe’s role accelerated. Through most of the past half a decade, Europe has attracted more Finnish business scholars than the United States. Meanwhile, the role of the rest of the world – primarily Asia – has risen from 1-2 scholars to about 4-5. During this era, the US remained the most attractive single country to Finnish business scholars, attracting 5-16 scholars in the late 1990s, and 11 in 2004 (**Figure 2.8 and Figure 2.9**).

Figure 2.7 Finnish Fullbright Scholars (1953–2004)

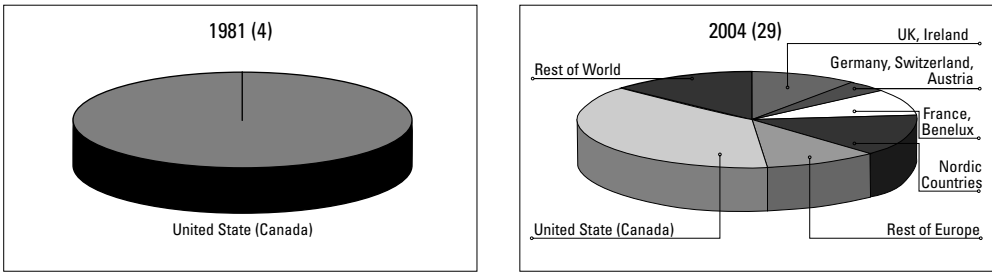


Box 2.4 The Foundation for Economic Education (LSR)

“Today, we are rapidly moving toward a genuine information society, in which the majority of products and services are produced, distributed and consumed in a digital form vis-à-vis information networks,” argues Matti Lehti, Chairman of LSR and CEO of TietoEnator. “Clearly, investments into expertise and knowledge are the society’s most vital investments in such an environment.”

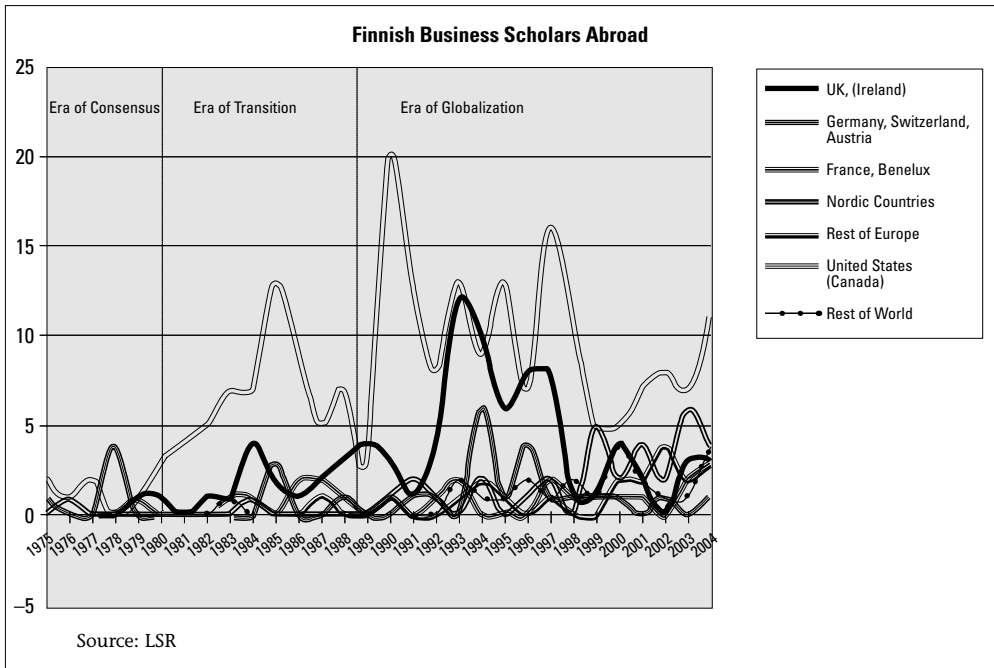
Source: LSR.

Figure 2.8 Finnish Business Scholars Abroad (1975–2004)



The accumulated total of the past 30 years reflects these trends. Between 1975 and 2004, the United States has attracted more than 220 Finnish business scholars, UK/Ireland almost 90, the other country groups (Nordic, French- and German-speaking) each about 25.

Figure 2.9 Finnish Business Scholars Abroad (1981–2004)



3 EXECUTIVE SUMMARY: TOO LITTLE, TOO LATE

The most popular fields of study for international students in the U.S. are business and management (19 percent), engineering (17 percent) and mathematics and computer sciences (12 percent). As documented by a recent evaluation report, the internationalization of Finnish business disciplines has proved particularly difficult. The study at hand has been an effort to understand *why* internationalization is so difficult in the 'world's most competitive economy' (**Box 3.1**).

Economic Stages and Educational Exchanges

The development of Finnish-U.S. relations and various forms of educational exchanges, including mobility in business education and research, has been subject to the Finnish economic development. The Finnish-U.S. exchange in higher education and research was 'normalized' only after the mid-1980s, as reflected by the initiation of scientific and technological cooperation agreements, but numbers have remained marginal even after the collapse of the Soviet Union and the transition to the innovation-driven economy.

During the factor-driven economy, the Finns were too poor, and too preoccupied with economic and political survival to benefit from the nascent exchange programs. During the investment economy, the geopolitical exigencies of the Cold War basically restricted opportunities for such programs, except for seemingly neutral fields of 'pure science' and 'pure culture'. During the innovation economy, the Finland became one of the wealthiest countries in the world – but this has not had a substantial impact on the Finnish-U.S. exchange programs.

During the factor economy, the U.S. Finnish exchange was at best nascent, at worst absent. During the investment economy, this absence was forced by the special relationship between Finland and the Soviet Union. With the innovation economy, the momentum of exchange programs is in Europe. The US universities remain vital to Finnish scholars (**Box 3.2**). However, the Finnish-U.S. exchange suffers from a 'triple whammy'.

Box 3.1 Bring Foreign Talent to Finland

"I have followed the Finnish-US exchange for some 50 years," says Professor Pekka Tarjanne, former Secretary General of ITU (International Telecommunications Union). "We should focus on exchange students in schools. Recently, their numbers have multiplied. Such experience facilitates language skills, while creating new capabilities in globalization... True, we have been followers in US exchange. Even greater concern should be that so few foreigners come to Finland. In the research sector, I have criticized Finnish universities and particularly professors who like to have great international geniuses in research groups, but not in office... Much of this has to do with our own ways. Other Nordic countries have a more flexible atmosphere."

Box 3.2 Top US Universities Are Vital to Finnish Students and Scholars

As one of the leading Finnish industrialists, Georg Ehrnrooth studied at the Helsinki University of Technology. He has served as President and CEO of Metra, President and CEO of Lohja, just as he has held various executive positions at Wärtsilä, among others. In addition to his role as director in many other major corporations (Assa Abloy, Rauraruukki, Karl Fazer, Sandvik, Sampo), he remains Vice Chairman of the Boards of Directors of The Research Institute of the Finnish Economy (ETLA) and Finnish Business and Policy Forum (EVA).

“During the post war era, Finland was , in the ‘gray zone’ between east and west,” says Georg Ehrnrooth. “Mainly through the ‘Wallenberg companies’, Sweden had deep contacts with the US industry. Norway and Denmark were NATO countries. As a consequence, natural contacts between US and our neighbors were much closer than ours. Another reason was the income level, which was low in Finland, making it difficult for young people to go abroad.”

In the coming years, the Finnish economy shall be driven by the technology sector even more than in the past. “In high tech areas US universities and research centers are leading in the world, almost all Nobel prizes go to teams from US,” says Ehrnrooth. “It is very important that Finnish students on all levels have a possibility to study in top US universities. It is also important that our universities can attract US and other foreign top students to Finland, and that both Finnish and foreign experts are ready to work here. Finland must be an attractive country to live and work in. It is important that we create some top level universities, up to now the strategy has focused more on volume than on quality. Taxation is also of great importance.”

America’s Academic Mecca

Until World War II Germany retained its position as the Finns’ most important destination for scientific and travel destination. Organized exchanges between U.S. and Finnish institutes of higher learning were consolidated during the 1960s, when the postwar generation of Finnish researchers, particularly social scientists (economics, political science, and sociology), saw the United States as a kind of academic Mecca. In addition to the Fulbright program, Finnish and American scholars have obtained funds from other sources to finance their trips to each other’s country, including the Rockefeller Foundation, the National Institutes of Health, the W.K. Kellogg Foundation (agriculture, forestry, and food production), the Ford Foundation (“Leader Grants” of the 1950s and early 1960s), the Thanks to Scandinavia Foundation, the American-Scandinavian Foundation and the Finlandia Foundation. The U.S. influence was strongest in the 1950s and weakest in the 1970s. To some degree, Finnish sources have provided financing for scholarly and professional exchanges, particularly the Academy of Finland. Large private foundations – including the Finnish Cultural Fund, the Wihuri Fund, the Eemil Aaltonen Foundation, the Gyllenberg Foundation, O. Huttunen Foundation and the Sigrid Juselius Foundation – have also allowed many Finnish researchers to travel to the U.S. for study or research.

Nordic Heritage, Anglo-Saxon Tradition

Recently, Finland's role in the European integration has brought about a view that the country is a natural part of continental Europe. Mobility trends do not reflect such views. At the turn of the 1980s, there were fewer than 2,400 Finnish students abroad; in 2002, this number had more than doubled to almost 5,000. In two decades, the role of Nordic mobility declined dramatically. The role of continental Europe was halved, whereas that of the Anglo-Saxon nations as mobility targets more than doubled (35 percent), while that of Estonia exploded (24 percent). It is the Nordic heritage and the Anglo-Saxon cultural tradition that dominate the Finnish mobility. Among business students, these trends are more poignant. In 2001–2002, some 64 percent of all Finnish students studying abroad were attracted by Anglo-Saxon countries, 24 percent by continental Europe (half of these studied in small Euro nations), 21 percent by Nordic countries. UK is most attractive to business students, followed by Sweden, Germany and the United States. Overall, Finnish mobility trends trail trade and high-tech relationships with the country's primary partners, including Germany, particularly Russia and the emerging markets – not to speak of America's innovation centers.

Exchange Programs between Finnish and U.S. Universities

According to a 2005 survey, Finnish universities had altogether 95 bilateral exchange agreements with 70 American universities. Overlapping exchange programs were few. In average, there were four to five exchange partners per university, but variation among the universities was relatively high. While the exchange partners were located across the United States in 35 different states, Eastern and Northwest states were most prominent. Among universities, Michigan Technological University was the most popular one with five Finnish partners.

Finnish Students and IIE Programs: Trailing Behind

Through much of the Cold War, the number of Finnish students trailed well behind other Nordic countries. With the 1980s, the volume of students almost doubled in Scandinavian countries, whereas Finland fell behind. In the 1990s, the number of Finnish students climbed from 740 to some 900. After these peak years and 9/11, the growth trend was reversed in every Nordic country.

American-Scandinavian Foundation: The Role of Followers

Swedish, Danish, Norwegian, and even Iceland's scholars have participated in the US exchange flows since the early 1910s; the first Finns joined in only toward the end of the 1950s, half a century later. At the end of the 1950s, 'Ford Foundation Finnish Leaders Grants' enabled Finnish leaders in communication, arts and legal professions to visit the U.S., while allowing U.S. leaders to visit Finland for similar exchanges. Almost 3,500 scholars participated in the ASF exchange between 1912 and 1997. The U.S.-Finnish ASF exchange was less than 6 percent of the Nordic total. The role of the Finnish students and scholars has been only a third of what one might anticipate. *None* of the almost 80 U.S. scholars who visited Finland

represented business studies. Only five of the 115 Finnish scholars who studied in the U.S. have been business scholars; less than 5 percent of the total. After the Cold War, European integration has attracted more scholars to EU nations.

Fulbright Fellows: The Marginal Role of Business

The first Fulbright professors arrived in Finland from the United States 50 years ago, in 1953. Despite the number and variety of these venues, recessions, and cost increases have occasionally placed a heavy burden on Finnish-U.S. scientific cooperation. The peak for ASLA scholarships was the early Kennedy era (1962–63), when close to 170 Finnish students and teachers visited the U.S. on ASLA scholarships. From the 1950s to the early 1990s, U.S. business was the great invisible in these exchange programs. During the past half a century, the number of Finnish Fulbright scholars specializing in economics has varied from none to seven researchers per year. Recently, there have been efforts to rejuvenate the exchange, primarily through new collaborations and partnerships.

Foundation for Economic Education (LSR): Eclipse of US Dominance

Between the late 1960s and early 1980s, the number of Finnish business scholars abroad supported by the Foundation of Economic Education was only two to four persons per year. Except for a brief spike in 1978, most studied in North America. During the first half of the 1980s, the annual number grew almost fivefold from 4 to 18. Through most of this period, North America remained the most important target country. Europe also attracted a steadily growing number of scholars. In the second half of the 1990s, the number of scholars in North America began to decline, almost halving by the early 2000s. At the same time, Europe's role accelerated. During this era, the US remained the most attractive single country to Finnish business scholars. Between 1975 and 2004, the United States has attracted more than 220 Finnish business scholars, UK/Ireland almost 90, the other country groups (Nordic, French- and German-speaking) each about 25.

The Specter of the Cold War

During the Cold War, the Finnish-U.S. exchange in business studies did not conform to the norm of *cultural* exchange between the two countries. Before the popularity, even faddishness of business studies in the late 1980s and 1990s, the discipline was too controversial. After all, it promoted American capitalism, which was considered a *political* threat to foreign policy neutrality, until the demise of communism and the collapse of Soviet Union in 1991. When Finland joined the European Union, this coincided with the new momentum of the exchange programs in the EU nations. Concurrently, the United States became a distant destination. As the Nokia-led stimulus to the national economy was exhausted by the turn of the 2000s, Finland excelled in technology innovation but stumbled in managerial competences and downstream activities, such as marketing and services. It was then that the 'triple whammy' of the Cold War era returned to haunt Finnish success.

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- ¹⁹ Including the Academy of Finland and large private Finnish foundations (the Finnish Cultural Fund, the Wihuri Fund, the Emil Aaltonen Foundation, the Gyllenberg Foundation, O. Huttunen Foundation, and the Sigrid Juselius Foundation).
- ²⁰ That is, Humanities, Social Sciences, Natural Sciences, Medicine, Physics and Technology, Architecture, Agriculture, Forestry, and Food and Nutritional Sciences). This is the case of most private foundations as well.
- ²¹ Today, the LSR Board consists of 45 men and women, most of them in active service and all with great careers in business and/or in the academic sector. The (June 2005) market value of the LSR portfolio is 110 million euros.
- ²² According to Kari Asp, for long-term research abroad (more than 2 months) provided grants have been encoded relatively reliably as a distinct group. The number of grants from 1975 is pretty broad. The same person may have received continued funding to the same target, especially if the (Ph.D.) dissertation has been done entirely in a foreign university. However, there are not too many such cases in the material, so the picture should be pretty accurate. The role of exchange students is more difficult. The old data lacks grants of less than 3,000 Finnish marks. As a result, the pre-1981 data is not too useful. On the other hand, there were hardly any exchange students at the time. Rather, visits abroad were all kind of 'supplementary studies.' During 1981 and 1986, the problem of 'small grants' is less significant. Data is pretty good since 1987. However, the years of 1987-1991 are problematic because the exchange students funding at the Helsinki School of Economics was steered through the School. Thereafter, some grants have been forwarded to, among other schools, Vaasa and Turku. Overall, the years 1992-2004 exchange funding data is pretty reliable. The target countries are a different story because, especially during the past few years, 'exotic target countries' (e.g., Argentina, Taiwan) have provided 'additional points' to the applicants. See Kari Asp, Personal communication, March 23, 2005.