



# Framing the Finnish economic competitiveness debate: What does the U.S. grand strategy search teach us?

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**Abstract**

The following is a travel report that makes an effort to understand what can be said about the grand strategy of the United States of America and then apply these lessons on Finnish industrial competitiveness policy. The report is based on a study tour of the author to Washington, Detroit and Chicago in March and April, 2015.

For a more detailed abstract, see the summary.

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## SUMMARY

After the Cold War, the United States (the U.S.) became the first globally leading superpower. At the same time, it became the first non-Eurasian leading superpower. After having achieved independence, its evolution has been expansionist, not only politically but also economically. As a consequence, even a Finnish industrial competitiveness policy practitioner must realize the significance of the U.S. For example, during the last two decades, other nations have wondered about its ability to grow in the digital field. Almost all the so-called digital platform companies – Google, Amazon, etc. – seem to come from America. Most importantly, the significance of the U.S. as the framework-builder of the world economy is crucial for others. In this report, I will assess the U.S. grand strategy, what can be said of it, and what Finland in general and its competitiveness policy in particular should learn from it.

Officially, no grand strategy exists. Each administration brings about its own strategies. But on a historical continuum, certain wider policy goals remain unchanged. These can be best understood by paying attention to the core national interests. These in turn are usually interwoven with values, geopolitics, and the economy. Values and policies do not necessarily contradict each other, but when core national interests are at stake, expediency is often forced to take priority.

The end result is a process in which the U.S. creates global order. Part of this process has been the creation and strengthening of the framework for economic interdependency and the development of rules for international trade and policy. The U.S. has created the world reserve currency and acts as the global lender of last resort. Without a dominant (and ultimately military) power, this would not be possible.

The U.S. got entangled in the world at the latest after the emergence of nuclear parity – in reality, much earlier. Practically, it has no alternative but to hold on to its position and continue on its path. Today, it faces challenges in a rising Asia, in Russia's difficulty in accepting the U.S.-led world order, and in Middle East volatility. From the U.S. point of view, it is of utmost importance that stability and democracy continue in Europe.

The U.S. Constitution established a republican and federal form of government. Freedom and equality before the law are core principles. Internally, the U.S. experience points to a gradual development of these same principles. A republican form of government presupposes the separation of executive, legislative and judiciary powers. In economic terms, these principles promote a free market economy. The U.S. also projects its values internationally. Foreign policy actions are often justified by constitutional values. What is most interesting is the observation that democratic states seem to handle their mutual relations peacefully. This observation has disrupted the balance-of-power principle of the so-called realist thought of school and motivates the promotion of a world order built on liberal principles.

From a geopolitical point of view, the core U.S. interest is to prevent the emergence of a hostile Eurasian rival state or state coalition. Consequently, the most significant long-term geopolitical goal is the promotion of stability and democracy on the Eurasian continent.

The economy is inextricably connected to U.S. strategic thinking. Only a sufficiently powerful economy enables the realization of a long-term strategy. After World War II, the U.S. share of the global GDP was 50 percent. It is now about 25 percent and will gradually decline to reflect more of its global population share. The U.S. global GDP share should remain sufficiently high long enough to allow the realization of its long-term strategy.

Historically, economic policy has been adjusted according to political realities. Technological development affects strategic thinking. From the Declaration of Independence until the end of the Cold War, the foundation of U.S. economic strength was the techno-industrial base extensively promoted by public research funding. This foundation is still strong but is no longer the core of the economic strategy. Today, the strategy relies more on the financial sector. The strategic goal is to promote not only free world trade but also a global dollar-based financial market.

The U.S. innovation system is an integral part of the above-illustrated global superpower project. The nation has one core comparative advantage, namely that of its managerial capability. The regulatory framework emphasizes consumer welfare and open competition. Unlike in many other economies, it is possible to build macroeconomic stability on monetary policy instead of fiscal policy. Public innovation resources are directed in the form of basic research funding to actors in the defense, health and energy sectors. The rise of information technologies has caused the share of private research funding to increase.

Finnish EU membership has shifted the main focus of Finnish economic growth policy to European cooperation. However, it is vitally important to follow U.S. economic policy. The ongoing transatlantic Trade and Investment Partnership negotiations are a culmination of a long historical chain of events. If successful, the result will be a so-called living agreement that opens a new gradual deepening of transatlantic relations. It is in Finland's interests to get involved early on in topics relevant to us.

It would be in Finland's interest to promote cooperation with the U.S. in foresight. Finland should position its innovation system properly to the leading American; copying is not an alternative. When the premises of the U.S. innovation system change, we also should consider transforming, if necessary. For example, the changes in the post-Cold War economic policy should be analyzed more properly. What does it mean for us that an increasing share of value-added in the U.S. is created by the financial sector?

Regarding the so-called Finnish spearheads of growth positioning to the regional and local U.S. innovation ecosystems would open innovation and market opportunities. For example, there are many hubs for cleantech, the bio-economy and the health sector around the U.S. to look at. Practically, cooperation requires local presence. More intensively adopting American managerial skills would promote Finnish competitiveness.

Digitalization is a special case because the core U.S. national interests are deeply linked to information technologies. The past two decades have been just a prelude in their development. In addition to the commercial use of information technologies, the value base and principles of Internet governance are becoming more important. Regarding the cyber dimension, the U.S. needs allies, and Finland should consider this as a possibility.



The opening of U.S. grand strategy thinking also reveals some answers to the future of Europe. It is useful to recall the original stages of European integration. An important force behind post-war integration was the U.S., as its main goal was the containment of Soviet communism. European integration is a European peace project; but after all, it is part of a wider trans-Eurasian integration project which is deeply linked to the long-term grand strategy of the U.S.

Finland is geopolitically centrally located. Its foreign policy approach often takes a bridge-building role. In times of change, the policy approach should be sharpened. The task is challenging, but if successful, it will also be economically rewarding.

## TIIVISTELMÄ

Yhdysvallat nousi kylmän sodan päättymisen jälkeen ensimmäiseksi globaalisti johtavaksi suurvallaksi. Samalla se on ensimmäinen ei-euraasialainen johtava suurmaa. Itsenäistymisensä jälkeen maan kehitys on ollut ekspansiivista. Myös suomalainen elinkeinopolitiikan toimija havaitsee väistämättä Yhdysvaltain merkityksen. Esimerkiksi viime aikoina keskeinen ihmettely on liittynyt maan talouden kykyyn kasvaa digitalisaatiota hyödyntäen. Miltei kaikki ns. voittavat alustatalouden konseptit, Google, Amazon, jne. näyttävät olevan amerikkalaisia. Yhdysvaltain merkitystä maailmantalouden johtajana ei liioin voi olla huomaamatta. Tässä raportissa tarkastellaan mihin maan ns. suurstrategia perustuu ja mitä opittavaa Suomella ja suomalaisella elinkeinopolitiikalle tästä on.

Virallisesti suurstrategiaa ei ole. Jokainen hallinto luo omat strategiansa. Mutta historiallisena jatkumona keskeiset päämäärät säilyvät vuosikymmenestä toiseen muuttumattomana. Parhaiten tätä jatkumoa voi ymmärtää tarkastelemalla maan elintärkeitä kansallisia intressejä. Nämä puolestaan kietoutuvat usein arvoihin, maantieteeseen ja talouteen. Arvot ja politiikka eivät ole välttämättä ristiriidassa keskenään, mutta elintärkeitä intressejä ajettaessa tarkoituksenmukaisuus menee usein pakon sanelemana etusijalle.

Lopputuloksena on ollut prosessi, jossa Yhdysvallat luo globaalia maailmanjärjestystä. Osana tätä järjestystä on ollut olosuhteiden luominen taloudellisen keskinäisriippuvuuden vahvistumiselle sekä kaupan ja politiikan pelisääntöjen kehittäminen. Yhdysvallat ylläpitää maailmantalouden reservivaluutta ja samalla se toimii globaalitalouden viimesijaisena luotottajana. Ilman dominoivaa ja viime kädessä sotilaallista voimaa edellä kuvattu ei olisi mahdollista.

Yhdysvallat kietoutui lähtemättömästi globaaliin maailmanjärjestykseen viimeistään ydinasetasapainon toteuduttua kylmän sodan alettua, todellisuudessa jo paljon aiemmin. Käytännössä sillä ei ole muuta vaihtoehtoa kuin pitää asemastaan kiinni ja jatkaa valitsemallaan tiellä. Tällä hetkellä sen intressejä haastavat mm. Aasian nousu ja tästä johtuva uuden tasapainon etsintä, Venäjän vaikeudet hyväksyä Yhdysvaltain luomaa maailmanjärjestystä ja Lähi-Idän arvaamattomuus. Euroopan demokratian ja vakauden säilyminen on Yhdysvalloille keskeinen intressi.

Yhdysvaltain perustuslaki loi tasavaltalaisen ja federalistisen hallitusmuodon. Keskeisiä periaatteita ovat kansalaisten vapaus sekä yhdenvertaisuus lain edessä. Myös maan sisäinen kehitys heijastelee näiden periaatteiden asteittaista kehitystä. Tasavaltalainen hallitusmuoto edellyttää lainsäädäntö-, toimeenpano- ja tuomiovallan erottamista. Taloudellisessa mielessä arvomaailma toteuttaa vapaata markkinataloutta.

Yhdysvallat projisoi arvojaan myös kansainvälisesti. Perustuslain arvoperustalla oikeutetaan usein ulkopoliittikan toimia. Mielenkiintoinen havainto on se, että perustuslaillisten demokratioiden eli tasavaltalaisia periaatteita noudattavien valtioiden on havaittu ratkovan kiistansa rauhanomaisesti. Ne ovat muutamaa poikkeusta lukuun ottamatta pidättäytyneet keskinäisistä sotatoimista. Havainto on vinyt pohjaa ns. realistisen koulukunnan voimatasapaino -ajattelulta ja motivoi osaltaan ns. liberaalin maailmanjärjestyksen edistämiseen.

Geopolitiikan näkökulmasta Yhdysvaltain keskeinen intressi on estää kilpailevan vihamielisen euraasialaisen valtion tai valtioliiton nousu. Merkittävin pitkän aikavälin

tavoite on demokratian ja vakauden asteittainen toteutuminen Euraasian mantereella.

Talous on kytkeytynyt erottamattomalla tavalla strategiseen ajatteluun. Vain riittävän vahva talous mahdollistaa suurstrategian toteuttamisen käytännössä. Toisen maailmansodan jälkeen USA:n BKT-osuus globaalitaloudesta oli noin 50 %, nyt se on noin neljännes ja laskee ennusteiden mukaan asteittain lähemmäksi maan väestöosuutta. BKT-osuuden tulisi säilyä riittävän korkeana riittävän pitkään, jotta em. strategia voisi toteutua.

Mahdollistaakseen tavoitteidensa toteutumisen Yhdysvallat on muuntanut taloutensa rakenteita ja perusteita tilanteen mukaisesti. Teknologinen kehitys on osaltaan vaikuttanut strategiseen ajatteluun. Noin 1900-luvun alusta aina kylmän sodan päättymiseen asti yksi talouden keskeisiä peruspilareita oli ns. aseellinen kompleksi, jonka yhtenä eteenpäin vievänä voimana oli vahva julkinen tutkimuspanostus. Tuo perusta on edelleenkin voimakas, mutta ei enää talousstrategian keskeisin osio. Kylmän sodan jälkeen strategia nojaa aiempaa vahvemmin finanssisektoriin. Tavoitteena on paitsi vapaan maailmankaupan, myös globaalin dollarivetoisen finanssimarkkinan synnyttäminen.

Yhdysvaltain innovaatiosysteemi rakentuu sen suurvalta-aseman lähtökohdista. Amerikkalaisten keskeinen kilpailuetu on heidän liikkeenjohdollinen kyvykkyytensä. Sääntely-ympäristö korostaa kuluttajan asemaa ja avointa kilpailua. Toisin kuin monissa kilpailijamaissa, makrotaloudellinen vakaus on mahdollista perustaa finanssipolitiikan ensisijaisuuden sijasta rahapolitiikkaan. Julkiset innovaatiopanostukset kohdistuvat perustutkimuksen muodossa puolustus-, terveys- ja energiasektorin toimijoille. Informaatioteknologian myötä kaupallisen tutkimuspanostuksen osuus on kasvanut.

Euroopan unionin jäsenyyden myötä Suomen talouskasvua edistävän politiikan päähuomio on kohdistunut eurooppalaiseen yhteistyöhön. Amerikkalaisen kehityksen seuraaminen on kuitenkin elintärkeää. Käynnissä olevat transatlanttiset kauppa ja investointikumppanuusneuvottelut ovat yksi vaihe pitkässä kehityskulussa ja sopimuksen toteutuessa Yhdysvaltain ja Euroopan taloudellinen kanssakäyminen syvenee. Toteutuessaan sopimus tulee olemaan ns. "living agreement" eli integraatio tulee jatkumaan asteittaisena. Suomen intressi on olla mukana meille keskeisten asioiden valmistelussa hyvissä ajoin.

Ennakointiyhteistyön syventäminen palvelisi Suomen intressejä. Suomen tulee asemoida oma innovaatiosysteeminsä oikein suhteessa johtavaan amerikkalaiseen, kopiointi ei ole vaihtoehto. Kun innovaatiosysteemin perusteet muuttuvat Yhdysvalloissa, on Suomen kaltaisten pienten valtioiden osattava muuntautua. Erityisesti kylmän sodan jälkeinen muutos amerikkalaisen talouspolitiikan perusteissa tulisi arvioida tarkemmin. Mitä tarkoittaa esimerkiksi Suomen kannalta se, että yhä suurempi osa amerikkalaisesta arvonmuodostuksesta syntyy finanssisektorilla?

Suomen kasvun kärkien osalta asemoituminen alueellisiin ja paikallisiin innovaatio- ja yrityskesittyymiin avaisi paitsi markkinoita, myös uusia kehitysnäkymiä. Biotalous ja cleantechin sekä esimerkiksi digitaalisen terveysteknologian osaamiskeskukset on eri puolilla Yhdysvaltoja. Käytännössä yhteistyö edellyttää paikallista läsnäoloa. Amerikkalaisen liikkeenjohdon "manageriaalisen" kyvyn laajempi omaksuminen lisäisi suomalaista kilpailukykyä.

Digitalisaatio on erityistapaus, sillä Yhdysvaltain elintärkeät kansalliset intressit kytkeytyvät merkittäväällä tavalla informaatioteknologiaan. Menneet kaksi vuosikymmentä ovat olleet internetin kehityksen kannalta vasta alkusoittoa. Jatkossa yhä tärkeämmäksi nousee kyber-avaruuden hallinnoinnin periaatteet ja taustalla oleva arvoperusta. Kyberulottuvuuden suhteen pätee sama kuin monen muunkin alan suhteen. Yhdysvallat tarvitsee liittolaisia. Myös Suomelle tässä avautuu mahdollisuus.

Yhdysvaltain suurstrategian avaaminen raottaa myös vastausta Euroopan tulevaisuudesta. On syytä palauttaa mieleen eurooppalaisen integraation syntyvaiheet ja -syyt. Toisen maailmansodan jälkeen integraatioprosessin käynnistämisen taustavaikuttaja oli Yhdysvallat, keskeinen päämäärä Neuvostoliiton kommunismin patoaminen. Kyseessä oli alusta asti paitsi Euroopan kansojen rauhanprojekti, myös trans-Euraasialainen integraatioprojekti, joka linkittyy Yhdysvaltain pitkän aikavälin suurstrategiaan.

Suomi sijaitsee geopolitiisesti tärkeällä paikalla. Se on ulkopoliitikassaan toteuttanut sillanrakentajan tehtävää. Murrosvaiheissa tuota roolia pitää terävöittää. Tehtävä on paitsi haasteellinen, onnistuessaan myös taloudellisesti palkitseva.

# 1 Background

The Ministry of the Employment and the Economy (the MEE) in Finland has been actively studying and analyzing the foundations of national economic livelihood, many of its peers have undoubtedly done the same. This discussion usually deals with the so-called internal competitiveness factors; factors within the reach of domestic decision-making. Usually, it has little to do with external factors, that is to say with those factors that shape the environment in which economic activity takes place. These are usually regarded as distant and out-of-reach for domestic policy-makers and thus as something not included in the discussion.

Regarding the internal factors, three recent studies have been made by the MEE. First, industrial competitiveness was studied, paying attention to the recent trends in globalization.<sup>1</sup> The key lessons from this study are summarized in the following. During the last twenty years, the world economy has witnessed an increasing geographic unbundling of value chains. Multinational enterprises now have a bigger possibility to optimize their business functions geographically in those spots that they see as best serving their interests. Even within an individual company, different tasks can be located optimally. This has led to a situation where national economies compete for the high value-added parts of these chains. The new productivity source is increasingly the individual. The trend has been enabled by the free and fast flow of information (by its digitalization), the containerization of sea and land transportation, and the increasing flow of international trade.

Especially hard hit has been the traditional economic backbone of the industrialized world, namely that of manufacturing. The more the GDP per capita grows, the smaller manufacturing's GDP share becomes. Manufacturing employment has dramatically diminished in many countries, including in the U.S., and what is often not noticed is that regardless of increasing global demand for manufactured goods, overall global manufacturing employment is increasing very modestly, due to automation and productivity gains. Still, the best manufacturing employment is highly value-adding due to its high innovation potential. Competition for these jobs is severe.

The value added of Finnish manufacturing has declined dramatically from 2007 to the present. This was mainly due to Nokia's boom and decline but there is also an overall underlying declining trend in some other industries as well. As seen by the recent MEE<sup>2</sup> study, in order to increase the value added of Finnish manufacturing, four general transitions should be promoted as follows. Regarding individual Finnish companies, it becomes increasingly crucial to engage geographically and thematically into areas of 1) growing global market needs by 2) producing more innovative solutions. Because of the above illustrated trends, for an individual company it becomes increasingly important to be able to 3) manage the global value and supply chains. Managerial skills are increasingly valuable. Assembly for example, depending of the business branch in question, is not usually the most critical part of the value chain anymore, although in some cases it may well be the core competitive factor. The most valuable parts of the value chains are usually those related to the headquarter functions. For Finland, as a national economy it is vital to be able to 4a) channel a fair share of the company value added to itself. This

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<sup>1</sup> [https://www.tem.fi/files/37744/TEMjul\\_9\\_2013\\_web\\_17102013.pdf](https://www.tem.fi/files/37744/TEMjul_9_2013_web_17102013.pdf)

<sup>2</sup> [https://www.tem.fi/en/current\\_issues/publications/manufacturing\\_as\\_part\\_of\\_a\\_vital\\_enterprise\\_structure.98158.xhtml](https://www.tem.fi/en/current_issues/publications/manufacturing_as_part_of_a_vital_enterprise_structure.98158.xhtml)

is not automatic anymore because the interests of companies and national economies do not always converge. To increase the resilience of the Finnish national economy 4b) the company base and their field of business branches should be widened.

Typically Finnish industrial competitiveness policy has relied on a horizontal approach that guarantees a competitive framework for all industries to succeed. As a small national economy with limited resources, selections at some level must be made. For example, we cannot maintain crucial research infrastructure in every field. Three broad thematic growth areas were identified as possible growth areas, namely bio-economy, cleantech, and digitalization.

In developed economies, service branches now represent about 70 to 80 percent of the total value added. It becomes more and more important to understand its value-creation processes and productivity potential. This was discussed in the most recent discussion paper – *Service Economy Revolution and Digitalization*.<sup>3</sup> In conclusion, economic restructuring will also continue within the service economy. Due to the nature of digitalization, the winning concept usually takes it all. We see this tendency in retail business for example, where e-commerce replaces the old established agents. Businesses that used to have a well-established local customer base, suddenly face global competition. It is vital that Finland produces globally winning concepts and business-platforms.

Increasingly, service-dominant logic will also affect the traditional manufacturing industries. Digitalization is all about information and global businesses will exploit its full potential by using big data and powerful algorithms embedded in more sophisticated business platforms. Take Google as an example. To support innovation, security, growth, and a free flow of information, clear regulatory rules and an institutional framework will become more and more necessary. How and by whom this is shaped is important.

Finland is a small open economy. It has greatly benefited from free and rules-based world trade. It has also greatly benefited from its EU membership. Without access to the high seas and to open information flow, the very foundations of her economic success would be gone. Conversely, improved access and a still more open and predictable world economy would be beneficial.

Finnish industrial competitiveness policies have thus an internal aspect that is subject to the decision-making of our own political and economic actors. But there is also an external aspect. The space in which Finnish businesses compete is very much subject to the wider world order. The external framework, the world order around us, is often taken as granted. However, it is in a constant flux.

After two decades of being part of the EU, many policies, including industrial policy, are considered in a domestic and EU framework. There are limits to this. The danger is that our vision becomes myopic. The often neglected fact is that it is impossible to understand Europe and its policies without looking both east and west.

As the world's most powerful nation, the very existence of the United States (later the U.S.) bears implications for other nation states. It is crucial to understand and anticipate its actions given that it has a GDP that represents one quarter of the world's total, it simultaneously has a GDP per capita that is one of the highest on

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<sup>3</sup> [http://www.tem.fi/files/43374/TEMjul\\_41\\_2015\\_web\\_22062015.pdf](http://www.tem.fi/files/43374/TEMjul_41_2015_web_22062015.pdf)

earth, it has the most powerful military and spends half of the world's military expenditure, it has a technological advantage in many fields, etcetera.

However powerful, the U.S. is not omnipotent. Nor can it take its position as granted, although there are good reasons to think that it will maintain its status. Especially as it has a population not more than five percent of the world's total, it cannot act alone. In a world with serious geopolitical fault lines, the U.S. also has to react to the existing realities. The world around is dynamic.

In the following, I will make an effort to understand what can be said about the behavior of the U.S. and then try to apply these lessons to the Finnish economic discussion.

I am curious to see to what extent we can speak about a U.S. grand strategy. By definition, I consider a grand strategy to be something that gives principled guidance to actions that define more or less all important policy fields. The following is based on my previous personal policy studies, academic and professional work, and especially on a recent study trip to the U.S. During the trip I had the opportunity to discuss and share thoughts with a wide range of experts (appendix 1).<sup>4 5 6 7</sup>

## 2 In search of a U.S. grand strategy

Neither the U.S., nor any other country, has an official grand strategy. Instead, policy strategies like the National Security Strategy, National Military Strategies, etcetera form the bases for everyday policy-making. Each administration has its own priorities. What is perhaps more interesting is whether we can find something that would be more constant, not altering from one administration to another but something that would help understand the very essence of the long-run U.S. behavior. It is more important what happens than what is said.

For this purpose, an interesting and useful way to look at the topic is offered by Dr. Richard Hooker. Hooker points out that the core of a national grand strategy is to preserve the core strategic (national) interests.<sup>8</sup> Defined this way, the main elements of a grand strategy have (once the U.S. was fully established) remained remarkably consistent. It becomes all about using power to secure the state.

Broadly speaking, the U.S. vital interests are 1) the defense of American territory and that of its allies, 2) protecting American citizens at home and abroad, 3) supporting and defending constitutional values and forms of government, and 4) promoting and securing the U.S. economy and standard of living.

Today, these interests are tested in a world where the bipolar (Westphalian) state system of the Cold War has given way to a more multipolar system featuring 1) a militarily and economically dominant but not all-powerful U.S., 2) a rising China and

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<sup>4</sup> Ministerial Adviser Martti Myllylä works at the MEE at its Enterprise and Innovation Department and has recently been responsible for policy analyses on economic competitiveness. The interest to combine economic issues with wider policy issues rises partly from his academic background.

<sup>5</sup> I especially thank Sheila R. Ronis for organizing the majority of my meetings and discussions.

<sup>6</sup> This travel report does not report all the discussions had during my trip. Instead, it reflects my personal, gradually developing understanding regarding the issue. The discussions during the trip had an important impact on this.

<sup>7</sup> Neither the conclusions nor the report as a whole represent any official policy of Finland.

<sup>8</sup> R. D. Hooker, Jr. *The Grand Strategy of the U.S.* Institute for National Strategic Studies. National Defense University. 2015. <http://lab.isn.ethz.ch/service/streamtest.php?id=184760>

India, 3) a resurgent Russia, 4) an economically potent but militarily declining Europe, 5) an unstable and violence-prone Middle East, 6) a proliferation of weak and failed states, and 7) empowered international and nongovernmental organizations, and non-state actors.

In this system the biggest threats that the U.S. is facing are 1) weapons of mass destruction used against the homeland, 2) economic disruption from without, 3) the rise of a hostile peer competitor, and 4) direct challenges to key allies.

To illustrate the concept of core national interest within this framework, one may look at Syria for example. In Syria there seems to be no direct threat to the homeland, to U.S. citizens or to those of its allies, or to the economy. Despite the humanitarian tragedy unfolding, the prospects for a large-scale military intervention seem low.

In Ukraine, the situation is somewhat different. With the annexation of Crimea and the hostilities in Eastern Ukraine, the long constructed post-war security architecture has been thrown over. Especially so when the 1994 Budapest Memorandum, under which Ukraine agreed to surrender its nuclear weapons in exchange for Russian guarantees of its territorial integrity, was violated. The Ukrainian case has triggered the use of economic sanctions but not a resort to a direct military confrontation for the time being.

In case of possible aggression, in the Baltic States for example, the case would be even clearer. It would be more likely than not that the U.S. would respond and would encourage its NATO allies to do the same. Failure to do so would not only collapse the NATO-alliance but the confidence among its alliance systems elsewhere. This would be considered a core national interest by any U.S. administration, although selling this perspective to the general public would be not simple.

U.S. global primacy is heavily linked to its capability to secure the undisturbed functioning of the world economy. The free flow of oil from the Middle East is perhaps not crucial for its own needs anymore. But it is more about securing the world economy's proper functioning that is in question. U.S. presidents have usually acted decisively when important economic interests have been in question.

Hooker points out that the means to foster grand strategy are similarly enduring over time. Its basic components include 1) fostering strong alliances and bilateral security arrangements, 2) maintaining a strong and survivable nuclear deterrent, 3) fielding balanced, powerful, and capable military forces, and 4) providing intelligence services that can ensure global situational awareness and provide strategic early warning.

These means are intrinsically linked to a 1) powerful economy and industrial base, 2) advanced technology, 3) an extensive military reserve component, 4) an educated and technically skilled population to fit for military service, and 5) a political system that is based on classical liberal democratic values and able to make clear and sustainable policy and resource decisions. Although these means still offer the U.S. a preponderant position, a gradual erosion of this base is visible at least in a relative sense.

Typically, America's solutions to meeting threats to core national interests are not new, although the technologies employed are. These solutions can be summarized in a following way. 1) The first principle is to meet the threat as far from the



homeland as possible. 2) It is important to use all available tools sooner rather than later and rely on intelligence, diplomacy, forward presence, and economic power. 3) Whenever possible, the issue should be addressed in tandem with allies, partners, or likeminded states working through international organization like UN, NATO, etcetera. 4) The U.S. also attempts to actively shape the international security environment to prevent or ward off security challenges. 5) As a last resort, military force may be used.

Military force has been used many times since the end of World War II. The operations have usually been successful when the threats to vital interests have been 1) unambiguous, 2) when the response enjoyed strong support from the public and Congress, 3) when overwhelming force was applied, 4) when strong alliances participated, and 5) when the strategic objectives were well understood. This superiority is best translated into battlefield and campaign success when translated into the synergistic appliance of air, space, sea, cyber, and land power.

The net effect has been to bring into being a rules-based international and economic order that has widely benefited much of the world.

*It falls to the dominant state to create the conditions under which economic interdependence can take hold (by providing security, rules of the game, a reserve currency, and by acting as the global economy's banker and lender of last resort). Without a dominant power to perform these tasks, economic interdependence does not happen. Indeed, free trade and interdependence have occurred in the modern international system only during hegemonies of Victorian Britain and post-war America.<sup>9</sup>*

The trend will be a continuation of a trajectory toward ever-greater civil-military integration, particularly in the intelligence, cyber, acquisition, logistics, and consequence management realms.

The U.S. inherited its position from Britain. Lord Palmerston, the British Prime Minister in the 19<sup>th</sup> century, famously said that Britain had no permanent friends or permanent enemies, only permanent interests. The American ideology and the American reality are not inherently incompatible. But two things must be faced. First, the U.S. cannot give away the power it has. There is no practical way to do that. Second, given the vastness of that power, it will be involved in conflicts whether it wants to be or not. Empires are frequently feared, sometimes respected, but never loved by the rest of the world. And pretending that you are not an empire fools no one.

Because the core national interests are wrapped around values, geopolitics, and economy, I will try to dig a little deeper into each of them.

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<sup>9</sup> Christopher Layne. *Rethinking American Grand Strategy: Hegemony or Balance of Power in the Twenty-First Century?*

### 3 The U.S., liberal values, and the world order

#### *The Constitution*

The Declaration of Independence codified the core American values. These in turn laid also out the first strategy. Because all men are created equal, the government requires the consent of the governed. Life, liberty, and the pursuit of happiness (not the promise of prosperity) were set to be people's right. British colonies went to war to absolve themselves from allegiance to the British crown – they declared commitment to a common cause and assumed the right to wage war and conclude peace.

The U.S. Constitution was formed and approved by the thirteen eastern states in 1787. After the Constitution was ratified, it replaced the Articles of Confederation, ultimately paving way for an effective republican and federal government. The Bill of Rights further clarified the ideals. The establishment of the United States of America as a voluntary union of several states with separate and different foundational characteristics, modes of government, economic structures, ethnic and linguistic make-ups, and political aspirations was codified in the Constitution through the devolution of only a restricted set of powers to the Federal level. The inherent tension was – to some extent – resolved in the Civil War of 1861-65.

Enlightenment era philosophers had great influence. British political philosopher John Locke was a major influence, expanding on the contract theory of government advanced by Thomas Hobbes. Locke advanced the principle of the consent of the governed in his *Two Treatises of Government*. The government's duty under a social contract among the sovereign people was to serve them by protecting their rights. These basic rights were life, liberty, and property.

Montesquieu emphasized the need for balanced forces pushing against each other to prevent tyranny. In his *The Spirit of the Laws*, Montesquieu argues that the separation of state powers should be in the service of people's liberty. Separating legislative, executive, and judicial power guarantee that liberty is respected.

Alexis de Tocqueville warned about the 'tyranny of the majority' in a democracy and advocated the rights of minorities. He warned that the courts needed to protect their rights by reversing efforts by voters to terminate the rights of an unpopular minority. *The Federalist Papers* (1787–1788) by Alexander Hamilton, James Madison and John Jay discussed the defining principles in detail.

Republicanism stresses liberty and 'unalienable' rights as central values, makes the people as a whole sovereign, rejects aristocracy and inherited political power, expects citizens to be independent in their performance of civic duties, and vilifies corruption. For the 'Founding Fathers,' republicanism represented more than a particular form of government. It was a way of life, a core ideology, an uncompromising commitment to liberty, and a total rejection of aristocracy.

The term 'republicanism' is derived from the term 'republic,' but the two words have different meanings. A 'republic' is a form of government (one without a hereditary ruling class) while 'republicanism' is a political ideology that can appear in republics or monarchies. In the U.S., two major parties were explicitly named after the idea—the Republican Party of Thomas Jefferson (founded in 1793, and often called the

'Democratic-Republican Party' and the predecessor of the current Democratic Party) and the current Republican Party (founded in 1854).

Domestically, the search for values has been a living process and continues to be. But no effort to look for a fundamentally different constitutional setting can be identified. The Constitution as a basic set of principles has survived for more than two hundred years.

### *Values and international relations*

Two competing approaches dominate the study of international relations. The realist school has been dominant and stresses the Hobbesian world view that international relations are a constant state of war between states. The crucial concept is that of the balance of power.

The other significant approach has been labeled as the liberal or idealist school of thought. The basic tenet is a belief in progress and liberal values. Over time these competing but also overlapping schools of thought have evolved into different forms. Realism has dominated and occasionally argued that liberalism is utopian.

Crucially, in 1983 Micheal Doyle<sup>10</sup> discovered empirically that **liberalism appears to disrupt the pursuit of balance-of-power politics**. The crucial finding was that democracies rarely go to war with each other and have a tendency to solve their mutual conflicts peacefully. This has strengthened the prospects for world peace established by the steady expansion of a separate peace among liberal societies.

Philosophically and intellectually, this finding forced scholars to look at the foundations of liberal theory. Doyle argued that among liberals, Immanuel Kant offers the best explanation. In 1795 Kant, based on his rational reasoning and not any empiricism, argued in his essay *Perpetual Peace* that there are three definitive articles that the 'practical idea of perpetual peace' requires. These are:

1. 'The civil constitution of every state shall be republican'
2. 'The law of nations shall be founded on a federation of free states'
3. 'The law of world citizenship shall be limited to conditions of universal hospitality'

If this metaphorical 'treaty' were signed by all nations, perpetual peace would be established. Summarizing Kant, it is first the moral duty of a politician to look for this to happen. Second, because politicians do not follow moral duties as a block, it becomes a gradual and long historical process in which 'nature compels' the world to do so.

The first definitive article of Kant's essay holds that the civil constitution of a state must be republican. This means a political society that has solved the problem of combining the moral autonomy of individualism and social order. In the private sphere, a basically private-property and market-oriented economy partially addresses this requirement. The public, or political, sphere is more troubling. The answer is a republic that preserves juridical freedom – the legal equality of citizens as subjects – on the basis of a representative government with a separation of powers.

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<sup>10</sup> Michael W. Doyle. *Kant, Liberal Legacies, and Foreign Affairs. Philosophy and Public Affairs*, Vol. 12. No. 3 (Summer, 1983).

The republican form of representation and the separation of powers are produced because they are the means by which the state is 'organized well' to prepare for and meet foreign threats and to tame the ambitions of selfish and aggressive individuals internally. States that are not organized in this fashion will remain internally fragile and risk a possibility to fail. It is not to say that a republican form of governance could not itself fail. Rather, the argument is that if this happens for some reason, there is an inherent tendency to return back.

The second definitive article states how republics, once established, lead to peaceful relations. When the consent of the people is needed to decide on war, it is the natural inclination of a citizen to avoid the costs of war and destruction. Liberal wars are fought only for popular, liberal purposes. Liberal states go to war with illiberal states if needed and usually to fight for their liberal cause: freedom. But they are extremely hesitant to go to war with each other and prefer to settle their internal disputes in peaceful manner. The world will achieve perpetual peace gradually in the long course of history and after many unsuccessful attempts. But in the meantime, the 'pacific union' of liberal states steadily expands, bringing within it more and more republics (despite republican collapses, backsliding, and war disasters).

The third definitive article limits the right of foreigners to hospitality, denying automatic citizenship.

Liberal economic theory holds that these cosmopolitan ties derive from a **cooperative international division of labor and free trade according to comparative advantage. Each economy is said to be better off than it would be under autarky.** Each thus acquires an incentive to avoid policies that would lead the other to break these economic ties. Keeping open markets rests upon the assumption that the next set of transactions will also be determined by prices rather than coercion; a sense of mutual security is vital to avoid security-motivated searches for economic autarky. Thus avoiding a challenge to another liberal state's security or even enhancing each other's security by means of alliance naturally follows economic interdependence.

*The spirit of commerce, which is incompatible with war, sooner or later gains the upper hand in every state. As the power of money is perhaps the most dependable of all the powers (means) included under the state power, states see themselves forced, without any moral urge, to promote honorable peace and by mediation to prevent war wherever it threatens to break out. They do so exactly as if they stood in perpetual alliances, for great offensive alliances are in the nature of the case rare and even less often successful.<sup>11</sup>*

A further source of liberal peace is that the **international market removes the difficult decisions of production and distribution from the direct sphere of state policy.** States can stand aside from these contentious market rivalries. Interdependence creates crosscutting transnational ties that serve as lobbies for mutual accommodation.

Liberal states have not escaped the realist security dilemma, but the effects of international anarchy have been tamed. The political bond of liberal rights and

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<sup>11</sup> See Kant. *Perpetual Peace: A Philosophical Sketch*.

interests have proven to be a remarkably firm foundation for mutual non-aggression. A separate peace exists among liberal states.

In 1795 there were three liberal regimes. The Swiss Cantons and the French Republic (1790–1795) and the U.S. (1776 – present day).

*The practicability (objective reality) of this idea of federation, which should gradually spread to all states and thus lead to perpetual peace, can be proved. For if fortune directs that a powerful and enlightened people can make itself a republic, which by its nature must be inclined to perpetual peace, this gives a fulcrum to the federation with other states so that they may adhere to it and thus secure freedom under the idea of the law of nations. By more and more such associations, the federation may be gradually extended.<sup>12</sup>*

#### *Today's liberal world order*

We have witnessed, in the long journey of human history, a gradual constitutional development taking place. Since the emergence of the first high cultures, a gradual transition towards organized and governed national entities is evident. Figure 1 illustrates the trends in governance during the last two hundred years. Overall, the number of nation states has increased, indicating that the centrifugal forces representing nationalistic tendencies have occurred while colonialism faded. But at the same time, especially since the end of World War II, the number of democratically governed states has increased. The number of autocracies has decreased since the 1970s. What is noteworthy, is that the amount of anocracies (states between democracies and autocracies) and so-called 'failed states' where institutional order seems to be lacking, has been on the rise.

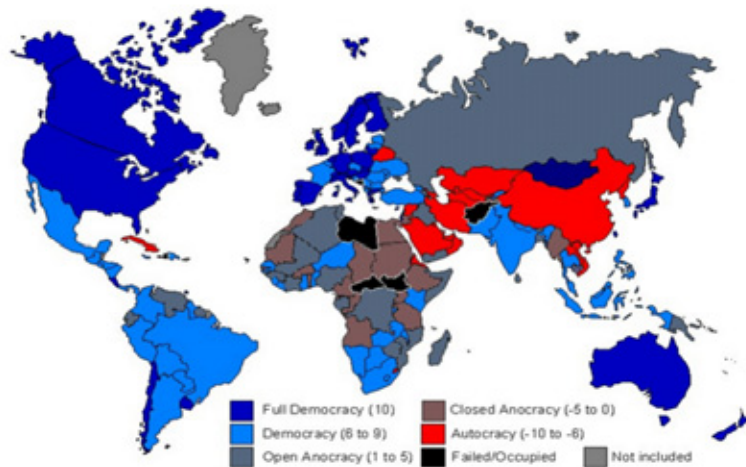
**Figure 1. Global trends in governance, 1800–2012**



Source: <http://www.systemicpeace.org/polityproject.html>

<sup>12</sup> Kant, *ibid.*

**Figure 2. Regimes by type in 2013**



Source: <http://www.systemicpeace.org/polityproject.html>

A functioning democracy takes time to develop and is difficult to be forced upon a nation by outsiders. Overall, however, since the establishment of the U.S., many democratically governed states representing republican ideals have seen the light and there are strong forces continuing this tendency.

The institutional order has taken significant steps. The League of Nations, the United Nations, multilateral arrangements among nations, etcetera have been established. International law is a developing field that so far only vaguely reflects the rational idea of a world law. Its sources lie in treaties between states, international customs, and general principles.

Inefficient in preventing World War II, the League of Nations was replaced by the United Nations. So far, it has been the key institutional framework where decisions to justify the use of coercion have been made. The veto power within the United Nations Security Council (UNSC) has been the privilege of the winners of World War II. From a normative as well from a formal ground, it has deficiencies that should at some point be reformed. It has functioned – although we have seen examples where it has been proven inefficient and its authority has been neglected (Kosovo was a precedent). Only recently, Russia has been arguing against the use of force against ISIL without the formal approval of the UNSC – a claim that has been dismissed by the West after the Ukrainian crisis.

Principles regarding national self-determination are still a complex issue. Nevertheless, they have been touched upon occasionally. One can recall the Responsibility to Protect principle, OSCE principles to respect existing borders, the Montevideo principles that define the requirements of a recognizable state, etcetera. However, a clear set of principles regarding the right to national self-determination is lacking.

The U.S. has been active in building an institutionalized world order based on its own core values. Security-wise, NATO has been the key institute. In the preamble of its charter, the participants swear to democratic values. Its fifth article speaks about mutual defense, whereas its second speaks about economic co-operation and

institutions. Economy-wise, the Bretton Woods institutions have been the most important players.

G. John Ikenberry states that the current world order<sup>13</sup> is based on liberal ideas and that this order is not in decline – quite the opposite. Historically the U.S. has been the central player, but ultimately the liberal world order is neither a U.S. nor a Western invention. The claims that the emerging-market states are learning to combine market economics with traditional autocratic (or semi-autocratic) politics in a process that signals an intellectual rejection of the Western economic model are just wrong.

According to Ikenberry, this panicked narrative misses a deeper reality. Although the U.S. position in the global system is changing, the liberal international order is alive and well. The struggle over international order today is not about fundamental principles. China and other emerging great powers do not want to contest the basic rules and principles of the liberal international order. Instead, they wish to gain more authority and leadership within it. Indeed, today's power transition represents not the defeat of the liberal order but its ultimate ascendance. Brazil, China, and India have all become more prosperous and capable by operating inside the existing international order – benefiting from its rules, practices, and institutions, including the World Trade Organization and the newly organized G-20. Their economic success and growing influence are tied to the liberal internationalist organization of world politics, and they have deep interests in preserving that system.

It is easy to see why Ikenberry's views regarding China's ambitions may be doubted by some. China's 'innovation mercantilism' for example, is seen not only in the light of economic catching up but also as a path to hegemony.<sup>14</sup> Whatever the truth, in practical terms, the U.S. is taking Asia's and China's rise seriously. The Obama administration's re-balance to Asia wants to use a wide array of tools to strengthen the U.S. position (again) in the Asia Pacific region where the most economically dynamic markets are. The Trans-Pacific Partnership negotiations (TPP) with Asia are regarded as strategically important, more so than the European counterpart, which is more about vitalizing the relationship with the U.S. and the Europe.

The U.S. played an active role in the first steps of the post-war European integration. The recent developments regarding the transatlantic integration process have taken the form of the Transatlantic Trade and Investment Partnership negotiations (TTIP). Multilateral trade agreements are (at least for the time being) replacing bilateral ones, putting the U.S. at center and in the driver's seat – even more so than before.

But after all, before digging into geopolitics, there is one fundamental question to be answered. Does the U.S. believe that the basic values of the republican form of government, so deeply embedded in its Constitution, will in the long run disrupt the pursuit of balance-of-power politics and pave the way for something resembling the Kantian idea of the federation of free states? This is sometimes said publicly. But more importantly, the way the U.S. promotes its core national interests seems to imply a positive answer. Again, actions speak louder than words.

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<sup>13</sup> <http://www.foreignaffairs.com/articles/67730/g-john-ikenberry/the-future-of-the-liberal-world-order>

<sup>14</sup> Chinese innovation mercantilism is discussed by Robert D. Atkinson and Stephen J. Ezell. See *Innovation Economics. The Race for Global Advantage*. Yale University Press. 2012.

## 4 U.S. grand strategy and geography

### 4.1 Geopolitics as a tool to understand international relations

Core national interests are often geopolitically oriented. Things happen in places. Geopolitics is a method of foreign policy analysis that seeks to understand, explain, and predict international political behavior, primarily in terms of geographical variables. Its origins are rooted to the realistic school of international relations that stresses the anarchical nature of the international system and the primacy of states as the main actors. But ultimately, it is not necessarily in contradiction with liberal-minded thinking.

Broadly speaking, it is useful to look at the world's geography and realize two important competing visions.

First, in the U.S., Alfred Thayer Mahan – a frequent commentator on world naval strategic and diplomatic affairs – believed that national greatness was inextricably associated with the sea and particularly with its commercial use in peace and its control in war. Mahan proposed six conditions required for a nation to have sea power:

1. An advantageous geographical position
2. Serviceable coastlines, abundant natural resources, and a favorable climate
3. Big enough territory
4. A population large enough to defend its territory
5. A society with an aptitude for the sea and commercial enterprise
6. A government with the influence and inclination to dominate the sea

The principal idea can be stated as the following: **'Who controls the world's oceans, controls the world.'**

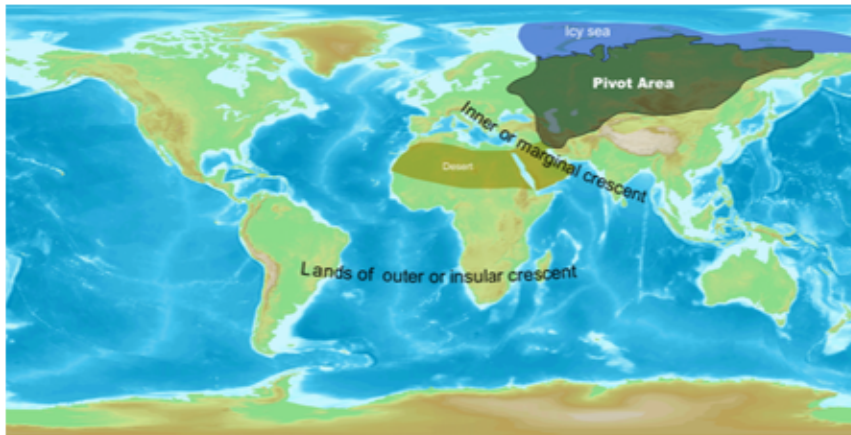
On the other hand, in Britain Sir Halford Mackinder's Heartland concept showing the situation of the 'pivot area' was established his Theory of the Heartland, formulated in his article entitled *The Geographical Pivot History*, published in 1904. Mackinder's doctrine of geopolitics involved concepts diametrically opposed to the notion of Mahan about the significance of navies in world conflict. He saw the navy as the basis of the Colombian era empire (roughly from 1492 to the nineteenth century) and predicted that power in the twentieth century would be determined by land power. The basic notions of Mackinder's doctrine involve considering the geography of the Earth as being divided into two sections: the World Island or the Core, comprising Eurasia and Africa; and the peripheral 'islands', including the Americas, Australia, Japan, the British Isles, and Oceania. Not only was the periphery noticeably smaller than the World Island, it necessarily required much sea transport to function at the technological level of the World Island – which contained sufficient natural resources for a developed economy.

Mackinder called the World Island region the Heartland. It essentially comprised Central and Eastern Europe: Ukraine, Western Russia, and *Mitteleuropa*. The Heartland contained the grain reserves of Ukraine and many other natural resources. Mackinder's notion of geopolitics was summed up when he said: **'Who rules Central and Eastern Europe commands the Heartland. Who rules the Heartland commands the World Island. Who rules the World Island commands the**



**World.'** His doctrine was influential during the World Wars and the Cold War, as Germany and later Russia each made territorial strides toward the 'Heartland'.

**Figure 3. Mackinder's geopolitical division**



Following Mackinder, Zbigniew Brzezinski, in his book *The Grand Chessboard: American Primacy and its Geostrategic Imperatives* (1997), developed a strategy for the U.S. to retain its global hegemony. He renamed the Eurasian Heartland the Grand Chessboard, and defined five countries as 'pivots' to control the Eurasian landmass: France, Germany, Russia, China, and India. As a National Security Advisor for various presidents, Brzezinski's ideas have influenced U.S. foreign policy since 1977.

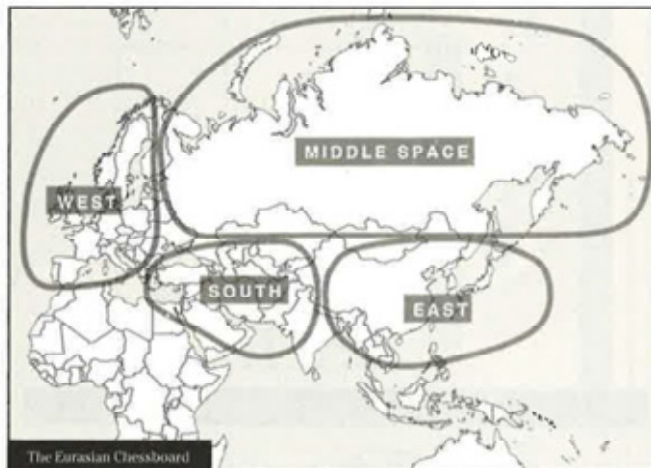
According to Brzezinski, for the first time ever, a non-Eurasian power has emerged not only as the key arbiter of Eurasian power relations but also as the world's paramount power. The defeat and collapse of the Soviet Union was the final step in the rapid ascendance of a Western Hemisphere power – the U.S. – as the sole and, indeed, the first truly global power.

Eurasia is thus the Grand Chessboard on which the struggle for global primacy continues to be played, and that struggle involves geostrategy – the strategic management of geopolitical interests. If America does not lead, the alternative is chaos! In 1997 Brzezinski wrote:

*A sustainable strategy for Eurasia must distinguish among the more immediate short-run perspective of the next five years or so, the medium term of 20 or so years, and the long run beyond that. Moreover, these phases must be viewed not as watertight compartments but as part of a continuum. In the short run, the U.S. should consolidate and perpetuate the prevailing geopolitical pluralism on the map of Eurasia. This strategy will put a premium on political maneuvering and diplomatic manipulation, preventing the emergence of a hostile coalition that could challenge America's primacy, not to mention the remote possibility of any one state seeking to do so. By the medium term, the foregoing should lead to the emergence of strategically compatible partners which, prompted by American leadership, might shape a more cooperative trans-Eurasian security system. In the long run, the foregoing could become the global core of genuinely shared political responsibility.*

*In the western periphery of Eurasia, the key players will continue to be France and Germany, and America's central goal should be to continue to expand the democratic European bridgehead. In the Far East, China is likely to be increasingly pivotal, and the U.S. will not have a Eurasian strategy unless a Sino-American political consensus is nurtured. In Eurasia's center, the area between an enlarging Europe and a regionally rising China will remain a political black hole until Russia firmly redefines itself as a post-imperial state. Meanwhile, to the south of Russia, Central Asia threatens to become a caldron of ethnic conflicts and great-power rivalries.*

**Figure 4. The Eurasian Chessboard of Zbigniew Brzezinski**



## 4.2 The U.S. – an inevitable superpower and its geopolitical grand strategy

Based on Mahanian and McKinderian ideas, the founder of Stratfor, George Friedman, argues that the U.S. has five geopolitical imperatives that dominate its foreign policy. During the petroleum era, whoever controls the larger Mississippi river basin has the keys to control the world. The cost benefit that a navigable river system within one of the most fertile landmasses on earth gives for capital accumulation offers a great advantage for those living there. Similarly, the most powerful economic powerhouses on the globe are those that are located on great navigable rivers and fertile lands that help capital accumulation as well as economic and political unification (Germany, France, etc.).

According to Friedman, the U.S. should:

1. Dominate the Greater Mississippi Basin
2. Eliminate all land-based threats to the Greater Mississippi Basin
3. Control the ocean approaches to North America
4. Control the world's oceans
5. Prevent any potential challengers from rising

The U.S. has been able to promote these imperatives one by one. The early history of the nation had much to deal with the first three.

After World War II, the U.S. consolidated its power, creating a global architecture to entrench its position. The first stage of this – naval domination – was achieved quickly and easily. The U.S. Navy at the beginning of World War II was already a respectable institution, but after three years of fighting across two oceans it had achieved both global reach and massive competency. Equally important was the fact that, as of August 1945, with the notable exception of the British Royal Navy, every other navy in the world had been destroyed. As impressive as the U.S.'s absolute gains in naval power had been, its relative gains were grander still. There simply was no competition. Always a maritime merchant power, the U.S. could now marry its economic advantages to absolute dominance of the seas and all global trade routes.

Friedman further points out, that over the next few years the U.S.'s undisputed naval supremacy allowed the Americans to impose a series of changes on the international system.

- The formation of NATO in 1949 placed all of the world's surviving naval assets under American strategic direction.
- The inclusion of the United Kingdom, Italy, Iceland, and Norway in NATO granted the U.S. the basing rights it needed to utterly dominate the North Atlantic and the Mediterranean – the two bodies of water that would be required for any theoretical European resurgence. The one meaningful European attempt to challenge the new reality – the Anglo-French Sinai campaign of 1956 – cemented the downfall of the European navies. Both London and Paris discovered that they now lacked the power to hold naval policies independently of Washington.
- The seizure of Japan's Pacific empire granted the Americans basing access in the Pacific; sufficient access to allow complete American naval dominance of the north and central portions of that ocean.
- A formal alliance with Australia and New Zealand extended American naval hegemony to the southern Pacific in 1951.
- A 1952 security treaty placed a rehabilitated Japan – and its navy – firmly under the American security umbrella.

Shorn of both independent economic vitality at home and strong independent naval presences beyond their home waters, all of the European empires quickly collapsed. Within a few decades of World War II's end, nearly every piece of the once globe-spanning European empires had achieved independence.

There is another secret to American success – both in controlling the oceans and taking advantage of European failures – that lies in an often-misunderstood economic structure of the Bretton Woods system. Even before World War II ended, the U.S. had leveraged its position as the largest economy and military to convince all of the Western allies – most of whose governments were in exile at the time – to sign the Bretton Woods accord. The states committed to the formation of the International Monetary Fund and the World Bank, to assist with the expected post-war reconstruction. Considering the general destitution of Western Europe at the time, this, in essence, was a U.S. commitment to finance that reconstruction. Because of this, the U.S. dollar was the obvious and only choice to serve as the global currency.

But the Bretton Woods system was about more than currency regimes and international institutions; its deeper purpose lay in two other features that are often overlooked. It stipulated that the U.S. would open its markets to participating states' exports while not requiring reciprocal access to its own. In exchange, participating

states would grant the U.S. deference in the crafting of security policy. NATO quickly emerged as the organization through which this policy was pursued.

From the point of view of the non-American founders of the Bretton Woods system, this was an excellent deal. Self-funded reconstruction was out of the question. The bombing campaigns required to defeat the Nazis leveled most of Western Europe's infrastructure and industrial capacity. Even in those few parts of the United Kingdom that emerged unscathed, the state labored under a debt that would require decades of economic growth to recover from.

It was not so much that access to the American market would help regenerate Europe's fortunes as it was that the American market was the only market at the war's end. And since all exports from Bretton Woods states (with the exception of some Canadian exports) to the U.S. had to travel by water, and since the U.S. Navy was the only institution that could guarantee the safety of those exports, adopting security policies unfriendly to Washington was simply seen as a nonstarter. By the mid-1950s, the Bretton Woods system had been expanded to the defeated Axis powers as well as South Korea and Taiwan. It soon became the basis of the global trading network, first being incorporated into the General Agreement on Tariffs and Trade and in time being transformed into the World Trade Organization. With a single policy, the Americans had not only fused their economic and military policies into a single robust system but had also firmly established that American dominance of the seas and the global economic system would be in the interest of all major economies with the exception of the Soviet Union.<sup>15</sup>

**Figure 5. American global supremacy (by Brzezinski)**



### 4.3 The contemporary geopolitical fault lines

In his famous book, *The Next Hundred Years*, Friedman discussed the contemporary geopolitical fault lines. There are five areas in the world right now that are viable candidates for being geopolitical fault lines.

First, there is the all-important Pacific Basin. The U.S. Navy dominates the Pacific. The Asian rim of the Pacific consists entirely of trading countries dependent on

<sup>15</sup> Russia finally joined the World Trade Organization in 2012.

access to the high seas, which are therefore dependent on the U.S. Two of them – China and Japan – are major powers that could potentially challenge the U.S. hegemony. From 1941 to 1945 the U.S. and Japan fought over the Pacific Basin, and control of it remains a potential issue today. Today we see a careful American re-balance with Asia.

Second, we must consider the future of Eurasia after the fall of the Soviet Union. Since 1991, the region has fragmented and decayed. The successor state to the Soviet Union, Russia, is emerging from this period with renewed self-confidence. Yet Russia is also in an untenable geopolitical position. Unless Russia exerts itself to create a sphere of influence, the Russian Federation could itself fragment. On the other hand, creating that sphere of influence could generate conflict with the U.S. and Europe. As seen today, the crisis in Ukraine tells the story.

Third, there is continuing doubt about the ultimate framework of Europe. For five centuries Europe has been an arena of constant warfare. For the last sixty years it has been either occupied or trying to craft a federation that would make the return of war impossible. Europe may yet have to deal with the resurgence of Russia, the bullying of the U.S., or internal tensions. The door is certainly not closed on conflict.

Fourth, there is the Islamic world. It is not instability that is troubling but the emergence of a nation-state that, regardless of ideology, might form the basis of a coalition. Historically, Turkey has been the most successful center of power in the Muslim world. Turkey is also a dynamic and rapidly modernizing country. What is its future, and what is the future of other Muslim nation-states? The Middle East may become the Balkans of today. Jihadism, at the heart of the Islamic world, is complicating assessments. At its heart, the battle against jihadism is essentially an ideological battle.

Fifth, Friedman identifies the question of Mexican–American relations. Normally, the status of Mexico would not rise to the level of being a global fault line, but its location in North America makes it important beyond its obvious power. As the country with the fifteenth highest GDP in the world, it should not be underestimated on its own merits. Mexico has deep and historical issues with the U.S., and social forces may arise over the next century that cannot be controlled by either government.

## 5 Economy as a premise for U.S. grand strategy

### 5.1 About U.S. economic policy goals

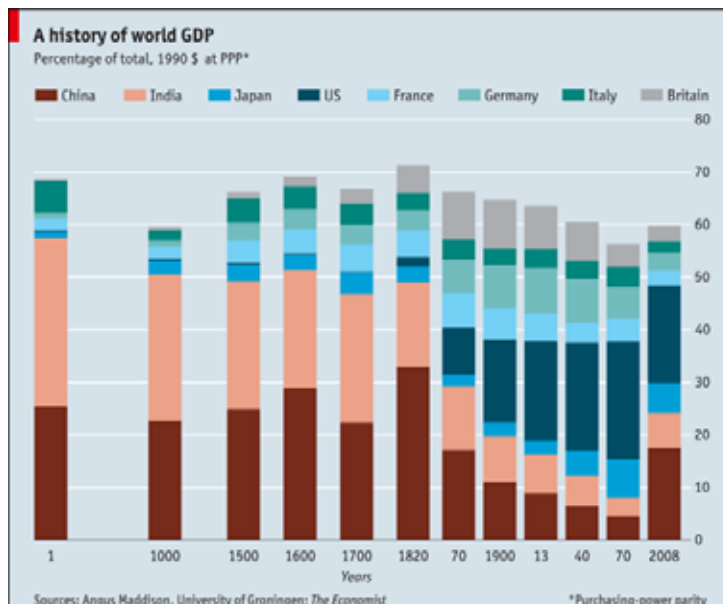
The core national interests of the U.S. are closely connected to economy. Constitutional values support liberal economic policies. The expansion of free world trade has a geopolitical dimension. The U.S. has actively shaped the world economy and continues to do so.

It is naturally the economic policy goal of every nation to offer prosperity for its citizens, especially in democratically governed states. The U.S. is striving for a high GDP per capita, and here it has succeeded well.

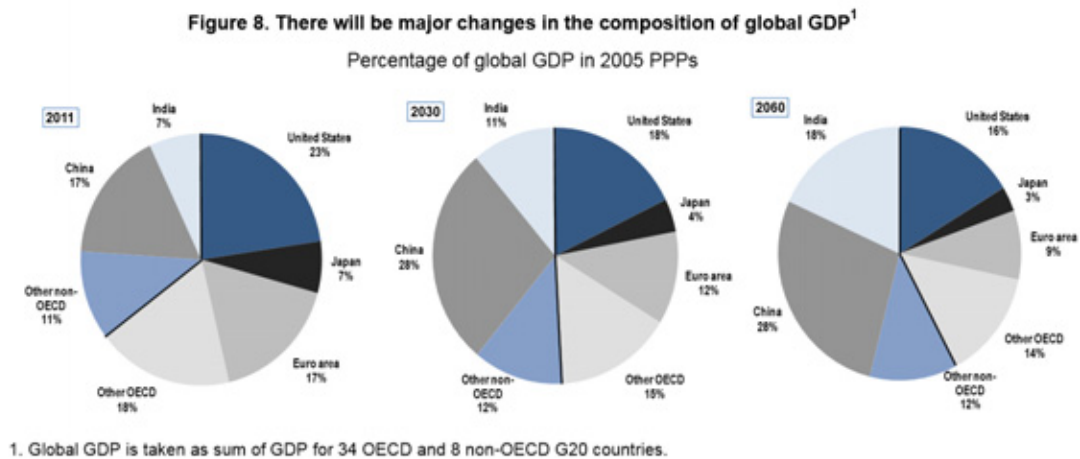
Economic well-being is a premise for a nation to project power. To become a leading nation requires that one also has at least one of the highest GDP shares. As figure 6 illustrates, the U.S. has led this game until recently but is now losing ground to China.

Promoting free world trade is a necessity to make the world a safer place for democracy (Wilson). Ultimately this will lead to a diminishing U.S. GDP share. This equation tells that the task embedded to shaping a liberal world order is also a gamble; a delicate balancing act. To be able to maintain its primacy and promote the strategic vision presented by Brzezinski, GDP share is a priority. There is a limited window of opportunity for the U.S. The exceptional 50 percent post-war GDP share is gone, but to maintain a **high enough GDP share for long enough** is crucial. And because GDP is all about value creation and channeling value to one's national economy, the way this is done shapes economic policies.

**Figure 6. A history of world GDP. The percentage of the total for the major states.**



**Figure 7. The projected changes of the GDP of the major powers**



Source: <http://www.oecd.org/eco/outlook/2060policynote.pdf>  
PPP=Purchase power Parity

## 5.2 The evolution of U.S. economic policies

Historically, the evolution of U.S. economic policy follows a certain pattern. From the beginning, it has an expansionist trend, it is linked to the larger policy framework, and it seems to reconfigure itself according to circumstances, reflecting political and technological changes. There is also a continuous seeking of balance between domestic and external priorities. The following intends to highlight some of the main aspects and historical changes. It is a story of free market capitalism that does not shy from putting its principles to one side when a bigger cause requires it. It is also about harnessing national resources in a determined and creative way.

### *From independence to expansion*

The U.S. Constitution established that the entire nation was a unified, common market, with no internal tariffs or taxes on interstate commerce. The extent of federal power was much debated, with Alexander Hamilton taking a very broad view as the first Secretary of the Treasury during the presidential administration of George Washington. Hamilton successfully argued for the concept of 'implied powers,' whereby the federal government was authorized by the Constitution to create anything necessary to support its contents. The so-called Commerce Clause of the Constitution, for example, gives the federal government the power to regulate trade between states.

Hamilton succeeded in building strong national credit based on taking over the state debts and bundling them with the old national debt into new securities sold to the wealthy. They in turn now had an interest in keeping the new government solvent. Hamilton funded the debt with tariffs on imported goods and a highly controversial tax on whiskey. Hamilton believed the U.S. should pursue economic growth through diversified shipping, manufacturing, and banking. He sought and achieved Congressional authority to create the First Bank of the United States in 1791. The charter lasted until 1811.

During its first decades the new nation expanded geographically and economically. The thirteen colonies become colonizers. New markets were consolidated for agricultural surplus. The Erie Canal was the first transportation route towards west connecting New York to the Great Lakes and thus paving way for the City of New York to become the most important port and a financial center. The establishment of the federal government made it possible to direct the nation's energies from internal struggle to an increasing economic, and thus also a political, expansion.

Regarding early technologies, the steel industry was important. In producing steel from iron, the new Bessemer process became important. Railroads knitted the new states together. Steel enabled the economic expansion to be coupled with the gradually expanding sea power.

Science already came to play an important role during the early days. The National Academy of Sciences was founded by President Lincoln in 1863. The relationship between the government and the big steel companies, Bethlehem Steel and U.S. Steel, became the bedrock of the economy. The steel industry's relationship with the navy became essential in creating the first trust networks, which later became a hot policy topic. Overall, the Civil War demanded massive mobilization efforts for the first time, this becoming an important capability during the following century.

The financial market witnessed several unstable periods and finally the panic of 1893 ignited the establishment of the Federal Reserve System (FED).

#### *The Progressive Era – expansion continues overseas*

To understand the current U.S. economy and society, perhaps the most defining period historically was the Progressive Era that lasted from about 1896 to 1932. It represented the fourth of the five U.S. party systems. The central domestic economic issues concerned government regulation of railroads and large corporations ('trusts'), the money issue (gold versus silver), the protective tariff, the role of labor unions, child labor, and the need for a new banking system.

On a larger policy arena, it also dealt with corruption in party politics, primary elections, the direct election of senators, racial segregation, efficiency in government, women's suffrage, and the control of immigration. Foreign policy centered on the 1898 Spanish–American War, Imperialism, the Mexican Revolution, World War I, and the creation of the League of Nations.

The great enablers were the 1913 FED and the institution of the federal income tax. As a political compromise, the FED became a semi-governmental institution with a decentralized structure comprising of twelve regional Federal Reserve Banks. Federal income tax laid the ground for an effective mobilization policy.

Initially the naval strategy relied on fortifications in the Atlantic ports. With the 1898 annexation of the Philippines, responsibilities extended to the Pacific. The U.S. industrial capabilities reached a point where America could shift its strategic defense doctrine from a reliance on coastal defense to an offensive sea control doctrine provided by its own battle fleet. This required peacetime expenditure, a mobilized industrial base, and broad public support.

Antitrust sentiments initially grew during the Progressive Era. However, when America entered the World War I, the national economy reverted to the aspects of



centralized financial and industrial power that had been objectionable in the internal discussions.

When the war ended, the European powers were prostrate. The Allies presented the Germans with a bill of 32 billion USD for war reparations. The British had to liquidate their overseas investments.

World War I drew the U.S. into European entanglements and fueled an expansionism no longer bounded by America's continental coasts and two great oceans. Military resource-building, together with war planning by presidential power, were now needed.

The Navy General Board was the first institutional peacetime body to plan for war. The Preparedness Movement stressed military readiness. It required peacetime expansion, a mobilized industry, and public support.

Technology and science become more important. A turning point was the sinking of the passenger ship *Lucitania* by a German U-boat in 1915. New institutions grew. The establishment of the Naval Consulting Board, the National Advisory Board for Aeronautics and the National Research Council represented the first steps in the American march toward modern, government-sponsored research – led by engineers, industrialists, and scientists. Also the establishment of the U.S. Chamber of Commerce, the Council of National Defense (in 1916), and the War Industries Board took place during this period.

The national economic policy forged government-led industrial partnership for war mobilization, ensuring the global post-war expansion of American corporations. The invention process became important, leading to the invention of the combustion engine for example.

As a result, U.S. entanglement with Europe increased. The League of Nations was established and the techno-industrial base strengthened. In 1918 the U.S. became the world financial center. Wall Street and the U.S. financiers now recognized an expansive potential to capitalize the reconstruction of Europe.

The GDP doubled, the population migrated to cities, and industrialization accelerated. Agriculture transformed from family farms to agribusiness and mass production took place. The U.S. now had what it required to restore the economic stability and employment on both sides of the Atlantic.

### *The Great Depression and World War II – forming a global superpower*

The 1929 Wall Street Crash led to the shattering of world trade. Franklin Delano Roosevelt was elected president in 1932. He relied on a highly eclectic group of advisors who patched together many programs into something known as the New Deal, which increased the role of the federal government.

In the midst of the Great Depression America turned inward. There was a period of isolationism in the face of the rising Nazism. Despite isolationism, the interwar mobilization continued. Once war came, military-industrial relations would be better than in World War I, thanks to the previous efforts and planning.

When World War II broke out, the U.S. was able to join in by mobilizing its industrial capabilities. Roosevelt created a new War Production Board in 1942. Vannevar Bush

was given the authority to use presidential resources and to lead the research and development under the White House's Office of Scientific Research and Development. The Manhattan Project was, however, buried in the army budget, becoming the nation's first 'black' program.

Bush led the government sponsored National Defense Research Committee (NDRC). Presidential funds were used without congressional oversight and the NDRC reported directly to the president. The NDRC was later absorbed by the White House's OSRD. Policy-making was fed by massive funding and innovation partnerships with industrial and university researchers and labs flourished. The era saw the birth of radar, radio-controlled fuzes, missiles, penicillin, mass production, and the atomic bomb. The role of the army as a whole now became more important than that of the navy.

Once the end of war was in sight, there was a growing need for a peacetime national strategy. **The result was a formalized peacetime preparedness alliance of the government, science, industry, academia, and the military. What emerged was a national security establishment that lasted through to the end of Cold War.** The Navy Department, under Secretary James Forrestal and his Wall Street colleague Ferdinand Eberstadt, led the thinking. They saw in **a new era with no distinction between war and peace.** The new plan saw that business could dominate national security and recommended a formal co-operation between the state and major economic power blocks. This idea of **continuous economic warfare** was earlier presented by the coming post-war president Dwight D. Eisenhower in 1930.

In 1941 the White House's Office of Production Management and Lend-Lease program for the Allies provided material support to Britain and France and formed the basis for the Bretton Woods Agreements and the Marshall Plan. Defense orders from heavy industry became the arsenal for democracy. During the war, the world new economic architecture was already considered. The Bretton Woods institutions, the World Bank, International Monetary Fund, GATT, and the Bank of International Settlements were to become the key organizations, together with NATO. The world economy was bound to the dollar.

#### *The Cold War era – a bipolar world*

Eberstadt's plan became the basis for the National Security Act of 1947. This milestone created the National Security Council, the Central Intelligence Agency, and the National Security Resource Board.

However, the Cold War interrupted the full implementation of the Bretton Woods policies. The Soviet Union became a geostrategic adversary and the containment policy had to be adopted. The world became bipolar.

**In sum, the mortal urgency of the World War II atomic age and Cold War sharpened the concept of the U.S. techno-industrial base and became a perpetual peacetime mobilization.** Throughout the Cold War, the Pentagon military acquisitions would be the government driver for science and technology, innovation, and the government. It created a market for aerospace, electronics, and nuclear weapons. This was justified by the market's capability to 'spin off' a succession of technologies in the commercial sector.

As was the case after World War I, now the investment banks and capital intensive firms, labor, and agribusiness also saw a prostrate Europe and an opportunity for expansion. The Marshall Plan for European reconstruction was an internationalist project. The Marshall Plan was later transformed into the OEEC and later the OECD, serving the ideas of economic development.

The European integration could have institutionalized under the OEEC or the Council of Europe. However, under strong influence by the U.S. and affected by the internal European politics, it gradually grew out from the European Coal and Steel Community.<sup>16</sup>

Policy encouraged overseas foreign investments promoting industrial and economic expansionism. Zbigniew Brzezinski expressed his theory of international production as a counterpart to international trade as early as 1970. Economists have only recently been shaken to actively analyze the functioning of global value chains and their dramatic and crucial effects on national economies. Not surprisingly, if we study the balance of payment sheets, we realize that the U.S. income from Foreign Direct Investment (FDI) usually exceeds that of foreign FDI payments from the U.S.

The guns and butter approach of Eisenhower's strategist C. D. Jackson took the stance that U.S. policy should force the Soviets to spend money on arms in order to prevent Soviet expansionism.

When Reagan came to power in 1981, the focus of the U.S. turned more closely on the Soviet Union. Reagan agreed with Brzezinski: the Soviet system was going bankrupt. It was the paradigm shift in the form of Strategic Defense Initiative (aka Star Wars) that paved the way for the increased economic stress that led to the collapse of the Soviet Union.

George H. W. Bush's election marked the final days of the Soviet Union. Mikhail Gorbachev's speech at the UN stated that the world economy is becoming a single organism. George Shultz realized that this was a speech born from weakness and that the only Soviet strategic asset would be its strategic weapons. Finally, the U.S. achieved its policy goals of 1947.

### *The Post-Cold War era – the first global hegemony*

After the Soviet collapse new nation states emerged and many of them joined the western political and economic alliances, especially NATO and the EU.

Until the end of the Cold War, it was the military-industrial complex that fed the rest of the economy with economic spin-offs. Today, the civilian ICT base is nourishing

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<sup>16</sup> *The Birth of the European Union.* <http://arrow.dit.ie/cgi/viewcontent.cgi?article=1009&context=aaschlawart> p. 57: The U.S. pressured France to come up with a supranational solution to the German problem. In October 1949, then Secretary of State Dean Acheson met in Washington, D.C. with "the more important American Ambassadors in Western Europe," and pressed for French action towards European integration. He gave them a letter specifying what he wanted them to do. "I have in mind," he wrote, "a timetable for the creation of supra-national institutions, operating on a less than unanimity basis for dealing with specific, economic, social and perhaps other problems." According to historian Desmond Dinan, "what the Americans really wanted was what eventually happened in Europe not in 1952 but in 1992: a single market involving the free movement of goods, services and capital." What the U.S. suggested was the type of strong federal system usually termed supranationalism. "To locate deep and abiding enthusiasm for the supranational principle, one must turn to the United States," according to British historian John Gillingham.

the economy as well as military, defense, and intelligence. Even space, an increasingly important domain of military strategies, is being explored by private enterprises. The possibility to extend surveillance based in information technology has created a new global environment where national intelligence authorities compete in cyberspace. This new economic-technological dimension is affecting the world politically, militarily, and economically.

Alan Greenspan became the chair of the Federal Reserve in 1987. What followed were policies of market interventions in addition to supervising and regulating banks, implementing monetary policy, and maintaining a strong official payment system. This finally marked the full implementation of the Breton Woods principles.

In 1989 the Bush team made Jim Baker the Secretary of State. **This marked a policy shift from the Pentagon to the Treasury and Federal Reserve. The techno-industrial base was no longer the core.** The monetary policy was consulted by a community associated with financial services.

The Clinton administration put a final end to the U.S. Cold War techno-industrial policy. Morton<sup>17</sup> recalls the memoirs of Robert Rubin, the 2003 co-chairman of Goldman Sachs during the Clinton era, where he stated that his role as Clinton's Secretary of the Treasury was all about creating a global financial market – **a policy moving from containment towards an enlargement of market democracies.** As an equivalent to the post World War II Marshall Plan aid, now Eastern Europe and former Soviet Republics were developed.

Corporations made competitive assessments based on an increasing capability to use IT to develop and perfect algorithms for return on investment. Institutional investors got into manufacturing company boards and extended financing operations (GE's GE Capital, etc.).

Globalization became the globalization of financial markets. With floating currencies, the value of money was about projected future value. The entailed risks had to be hedged. So derivatives, credit fault swaps, and other financial instruments also became vehicles for speculation. Loyalty was to come into question in shadow banking.

When Greenspan took office, the U.S. had no banks in the world top ten. The still controversial repeal of the 1933 Glass-Steagall Act in the 1999 Financial Services Modernization Act – eliminating the barriers to commercial banking, insurance, securities, and mortgages – was the final enabler for Greenspan's superbanking competitive strategy. In 2003 the U.S. had three banks in the top ten. Citigroup stood at number one, then the Bank of America, and JPMorgan Chase.

The numbers tell the story. In 1950, manufacturing represented 29.3 percent of GDP, whereas in 2005 it was just 12 percent. In the same years, finance represented 10.9 percent and 20.4 percent respectively. When looking company profits, the development is still clearer. In 2005 finance contributed 40 to 50 percent of all corporate profits.

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<sup>17</sup> See *Economic Security, Neglected Dimension of National Security* (ed. Sheila R. Ronis): John F. Morton's chapter, 'Toward a Premise for Grand Strategy'. I am mostly thankful to John F. Morton for the many lessons learned from him.

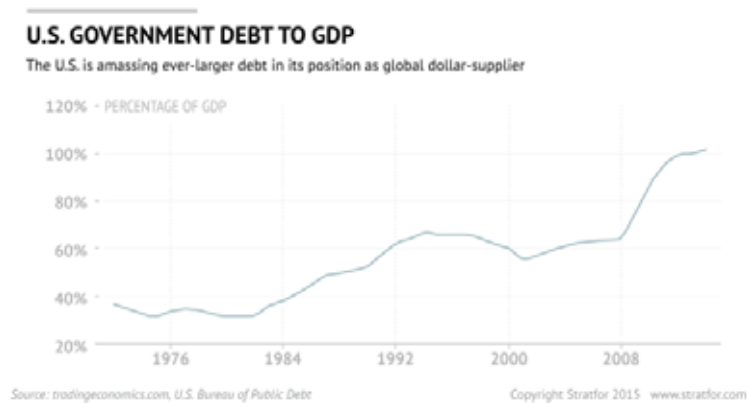
Once the industrial policy debates had been over 'picking winners and losers,' in the first decade of the 21<sup>st</sup> century and today, the debate is about being 'too big to fail.' The big dog 'inside the Beltway' is Goldman Sachs, no longer companies like Lockheed Martin, Northrop Grumman, or General Dynamics.

After 9/11 the Bush strategy was, some would say, about resource strategy. But Morton asks if it was, at bottom, a strategy to preserve the dollar as the international reserve currency. For Obama the strategic goal has remained the same.

### *The hot issues and the main pillars of U.S. strength today*

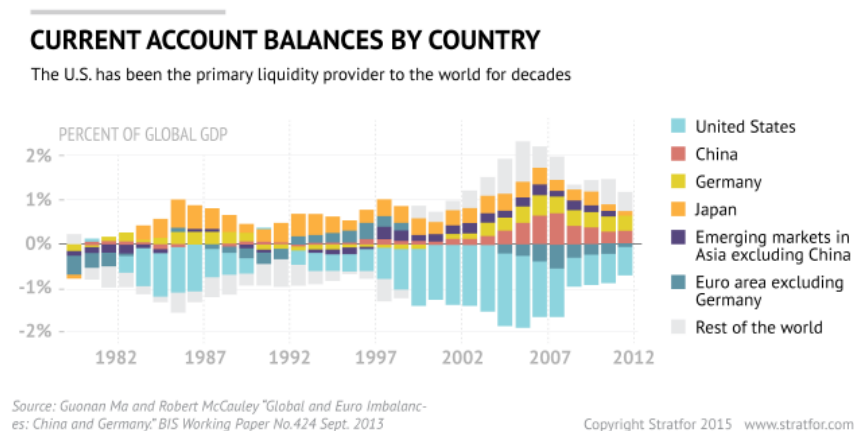
The imbalance of the U.S. economy with the rest of the world causes regular worry. This is linked to the accumulating of national debt. The U.S. government debt is at the moment about hundred percent of GDP, traditionally a critical level for an average national economy. Solving this problem is mainly a political one.

**Figure 8. The U.S. Government debt to GDP**



The world has got accustomed to the U.S. structural current account deficit. Whether this is critical or not seems to divide opinions. Overall, the biggest portion of the U.S. debt is owned by the domestic public. China's role, is limited.

**Figure 9. The current account balance by country**



The size of China's economy surpassed that of the U.S. in 2014 using purchasing power parity metrics. But the yuan still only has about a 2.2 percent share of

international payments; it has a long way to go before it truly begins to challenge the U.S. dollar's 44.6 percent share. Also, the Chinese currency is not fully convertible, which is a major requirement for any possible reserve currency. The final reason we have not yet seen a Bretton Woods moment between the U.S. and China is that we have not seen a Lend-Lease deal. The U.S. maintains its control of the world's sea lanes and thus has the ultimate decision-making power over global trade. Without the onset of a massive disruption, this state of affairs is unlikely to change anytime soon.

The vehicle that drives the rise and fall of empires rests on big wheels, and it takes a strong force applied over an extended period of time before an entire revolution can take place. The agreements struck during World War II marked the culmination of a long process in which the U.S. rose and Britain weakened. China has indeed undergone a remarkable transformation over the past three decades, but it is not yet in a position to effectively challenge the pillars upon which the U.S.'s global hegemony rests.

The U.S. military is one of the largest militaries in terms of its number of personnel. It draws its manpower from a large pool of paid volunteers, although conscription has been used in the past at various times of both war and peace. As of 2013, the U.S. spends about \$554.2 billion annually to fund its military forces, and appropriates approximately \$88.5 billion to fund Overseas Contingency Operations. Put together, the U.S. constitutes roughly 39 percent of the world's military expenditure. The U.S. Armed Forces has significant capabilities in both defense and power projection thanks to its advanced and powerful equipment and its widespread deployment of force around the world. This power is projected globally in all main operational fields; sea, air, land, space, and cyberspace.

Within sea power alone, the U.S. lead is staggering. The U.S. Navy operates 11 large aircraft carriers, all nuclear powered: no other country has even one. It has 57 nuclear-powered attack and cruise missile submarines – again, more than the rest of the world combined. Seventy-nine Aegis-equipped surface combatants carry roughly 8 000 vertical-launch missile cells, outmatching the next 20 largest navies. The U.S. Marine Corps alone is larger and more capable than the ground and air forces of all but few nations. It has a strong military capacity for amphibious shore control.

There is still a powerful Pentagon sponsored industrial base. Of all the world's military spending, the U.S. represents almost one half while the EU member states represent about one quarter. And compared to Europe for example, the R&D share of all military costs in the U.S. is on a much higher level. The new offset strategy initiated by the Secretary of Defense Chuck Hagel strives for the modernization of the U.S. conventional armed forces.<sup>18</sup> Technology is one force multiplier available to counter the quantitative benefits the Eurasian powers have.

Concerning manufacturing in general, although its share of total GDP has gradually declined, in the long run the value added has been on the rise. However, the high U.S. GDP per capita is mainly explainable by the developed service economy representing some 80 percent of its GDP. McKinsey, for example, estimates that the gap between Europe and the U.S. on GDP per capita is just due the more advanced U.S. service economy.

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<sup>18</sup> See for example Robert Martinage, *Toward a new Offset Strategy*, 2014.  
<http://csbaonline.org/publications/2014/10/toward-a-new-offset-strategy-exploiting-u-s-long-term-advantages-to-restore-u-s-global-power-projection-capability/>

One of the great ironies has been the U.S. political dependency on the oil-producing Middle-Eastern countries. The newly recognized unconventional oil and shale gas reserves seem to be changing the landscape. However, the energy profile for source and use will change drastically over the next 40 years. The next 20 years are the most critical for the U.S. to position itself with assured and secure forms of energy. As new technologies mature, the U.S. energy strategy will balance many questions. Among other factors, energy policy has geopolitical implications and U.S. interests and those of its allies will be prioritized.<sup>19</sup>

### 5.3 The U.S. National Innovation System

Modern economic competitiveness policy is mainly about innovation policy. To understand the U.S. National Innovation System,<sup>20</sup> one has to understand that a national innovation system is 'the network of institutions in the public and private sectors whose activities and interactions initiate, import, modify and diffuse new technologies (and solutions).' To better understand the systemic whole, the business environment, the regulatory framework, and innovation system should be looked at together. The innovation system matters because a nation's innovation success depends on this system working effectively and synergistically. And in the case of the U.S., it is not a separate phenomenon but one affected by everything that was described earlier.

We may first look at the **business environment**. When it comes to managerial talent, the U.S. is the world leader. It has developed this discipline from the 1950s and perfected it through its extensive system of business schools. Taking into account the role the U.S. plays in world politics, this is no wonder. Running the world creates talent that is applicable to military, business, etcetera. Today this talent is linked to a high ICT adoption within U.S. firms. There is a clear synergy between politics, military, and business.

Venture and risk capital activity is high and the nation analyzes and funds investment functions actively. Although these activities are regionally very concentrated, each state has its own actors. There is a general trend of high customer demand. Risk taking and entrepreneurship are rewarded and the attitude toward science and technology is supportive. There is also a collaborative culture and willingness to invest in the future, although recent trends indicate at least a temporary decline.

**Regarding the trade, tax, and regulatory environment**, the U.S. has generally embraced market competition. This has especially put an emphasis on maximizing consumer welfare. One can contrast this with the EU for example, which seems to embrace more producer welfare. Regarding the antitrust policies the debate is ongoing as to whether it has been too stringent and thus limited the emergence of the scaling required to win in global competition. It is not only relatively easy to start a new business, but it is also easy (at least in the non-unionized and non-governmental sectors) to close and downsize businesses. This is important because it lowers the burden of entrepreneurship and contrasts to the culture in Europe.

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<sup>19</sup> See, for example, the articles of Louis J. Infante and Keith W. Cooley in *Economic Security: Neglected Dimension of National Security*.

<sup>20</sup> Robert D. Atkinson. *Understanding the U.S. National Innovation System*. Information Technology and Innovation Fund, 2014. <http://www.itif.org/publications/2014/06/30/understanding-us-national-innovation-system>

The stability of U.S. macroeconomic policy relies on monetary policy rather than fiscal policy to adjust the cyclical growth rate. Tax neutrality has been valued but sometimes the policy is interventionist for preferred reasons (R&D, growth), sometimes also because of special interests. The corporate tax rate is generally high. Trade policy is based on the belief that nations will reveal their comparative advantage and that an open market-based trading system enables nations to achieve that advantage to benefit customers. The U.S. system of intellectual property has its roots in the U.S. Constitution by providing investors with the limited but exclusive right to their discoveries. By and large, the government itself does not get involved in picking particular industry standards, which are coordinated by the American National Standards Institute.

**Regarding the Innovation Policy Environment itself**, the support for research and technology is based on two fundamental aspects. These are the 1) support for mission-oriented research (defense, health, and energy) in federal laboratories and 2) support for basic curiosity-directed research through university funding. In 2013, the federal government financed approximately \$140 billion of R&D activity. Relative to private R&D funding trends, federal support for R&D has fallen substantially.

There are some 80 to 100 government research laboratories, some government operated, some contractor based. University research is supported through a number of agencies including Department of Defense (DOD), the Department of Education and the National Institutes of Health. Technology transfer systems have been actively developed. The Bayh-Dole Act allowed universities to retain the IP rights, giving them more incentives to commercialize research. The U.S. does not generally support firm level R&D unless it is related to achieving a core mission, especially one in defense. However, there are few recent exceptions. In 1981 a tax credit system was introduced. Sometimes targeted R&D support has been approved, the semiconductor industry being an example. President Obama's National Network for Manufacturing Innovation is modeled to copy the German Fraunhofer model but is limited in scale, at least for the time being.<sup>21</sup>

Innovation clusters (especially the DOD Silicon Valley) have been recognized by the government since 1990, with Professor Michael Porter popularizing the concept. The collaboration between industries and research institutes are encouraged. Foreign direct investment is encouraged in order to support technology transfer. President Obama's SelectUSA is one of the few FDI attracting schemes on a federal level. Generally there are few limits on exporting. Within the Commerce Department, the Bureau of Industry and Security oversees the transfer of certain sensitive technologies. Locally, technology diffusion and adoption are encouraged by the National Institute of Standards and Technology.

The U.S. K-12 education system is largely operated on a state and local level. The American higher education system is diverse and distributed in nature. Skills training is largely seen as a private sector responsibility but there is some federal role the Department of Labor in helping disadvantaged individuals to obtain skills. More than

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<sup>21</sup> The National Network for Manufacturing Innovation (NNMI) is a proposed network of research institutes in the U.S. that will focus on developing and commercializing manufacturing technologies through public-private partnerships between U.S. industry, universities, and federal government agencies. The NNMI will consist of up to 45 Institutes for Manufacturing Innovation (IMIs), each with a unique research concentration that will serve as regional manufacturing innovation hubs. A pilot institute was established in Youngstown, Ohio, in August 2012. Three additional IMIs were announced in May 2013.



many other nations, the U.S. has relied on high-skill immigrants to support its innovation system.

Globalization has affected the social fabric. The generally dynamic labor market has coped pretty well. However, recently the increasing polarization in the labor market has been noticed by both main parties in the U.S. The disagreement is over the means to solve the problem.

## 6 Finland and its economic competitiveness

In retrospect, one could argue that there seems to be a historical process in progress. However, for those who were engaged in events, it often seemed at the times anything but clear. Today again, clear geopolitical fault lines emerge. But the process seems to go forwards. Two big means carry it forwards, namely war and commerce. We should work toward commerce taking the upper hand.

Finland shares the core republican values with the U.S. and has benefited greatly from the current world order. Without free world trade our economic and political standing would be very different. Finland has every reason to wish that this order remains and that democratic and rules-based institutions will widen.

What lessons then, can be drawn from the above? Overall, Finland (including the MEE), has to (and will have to) assess its strategies according the changing environment. Geopolitically, Finland's location is unique. Although a small national economy, understanding the world around might pave the way for new policy approaches.

### 6.1 MEE-specific policy lessons

There are some lessons that the MEE could learn from the U.S. grand strategy search.

1. The first lesson is that we should follow more carefully the development of U.S. economic policies. And the rationale for its economic policy shifts is linked to the wider view.
2. Finland could increase foresight work with the U.S. For example, the next 20 years are crucial for the development of future energy systems. Technologies are being developed on a wide range of alternatives but at the moment no one knows all the answers of tomorrow's solutions. Short-sighted decisions today will be expensive. The same holds on many other fields, including the IT-sector.
3. Regarding Finnish innovation policies, we should position our own policies considering those of the global leaders. We cannot copy systems but we also cannot have an innovation system that does not take into account that of the leading systems. Therefore, monitoring closely the U.S. and other innovation systems is the key to our own success. We must understand how value creation takes place in the global economy and how we as a national economy can do it in a resilient way. From the U.S. perspective the post Cold War approach has changed. How should we calibrate? It is increasingly from financial services that the U.S. as a national economy makes its revenue. We should make sure that we have our own platform solutions (Google, etc.) that channel revenue to our economy.

4. The U.S. led political landscape is again on the move. Currently the TPP and TTIP negotiations are at a critical junction. The TTIP will likely materialize in some form and, once it arrives, it will become a living agreement. This will then initiate a process in which industrial standards gradually integrate. It is therefore important for Finland to closely monitor and influence issues important for Finland whenever possible, at the earliest possible moment. This is especially true in the strategic growth areas, digitalization, bioeconomy, cleantech, the health sector, service economy, etc.
5. Finnish international orientation takes place very much within the EU framework, this being a natural framework for us. To see the EU and the U.S. as economic competitors is understandable. However, this tendency should be rethought and a new more balanced and updated attitude should be adopted. European integration is a U.S. initiated process. European integration is for the European states but, ultimately, Europe can only be understood by looking both east and west. For this reason, we should not look at, for example, EU industrial policies in isolation of the wider picture.
6. Regarding our strategic growth areas, the most natural partners in the U.S. are found at a state and local level. Federal level co-ordination is possible. Co-operation should be increased. Bioeconomy and cleantech clusters should be identified and explored.
7. A special focus should be paid to digitalization. Digitalization links to the core national interests of the U.S. It crosses defense, economy, intelligence, etc. As a phenomenon, it is young and rapidly developing. An open internet and the free flow of information is a strategic interest of the U.S. while at the same time it is linked to security aspects. According to a Council on Foreign Relations study for example, the U.S. should identify partners among governments to shape and build cyberspace. Finland could benefit from deeper co-operation.<sup>22</sup>
8. The notion of national comparative advantage is on a move. The spillover effects of national innovation policies easily spread globally. Therefore we have to strategically rethink the best ways for a small national economy to gain the effects we set as a target for innovation policies. One specific area in which to learn from the U.S. is that of managerial capabilities.
9. As the TTIP will ultimately shape the regulatory framework, one area to look closely is the service sector. As mentioned in our service-economy report, we will face increasing competition where, due to the nature of digitalization, the 'winner is increasingly taking all'. And it is especially the financial sector that should be looked at carefully. It is within U.S. strategic thinking to manage the world's financial market and this will increase competition soon after the regulatory framework allows it. A thorough analysis regarding European and Finnish finance and other service sectors should be deepened to understand the potential impacts.

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<sup>22</sup> See for example *Defending an Open, Global, Secure, and Resilient Internet*. Council on Foreign Relations, 2014. John D. Negroponte, McLarty Associates, and Samuel J. Palmisano. <http://www.cfr.org/cybersecurity/defending-open-global-secure-resilient-internet/p30836>

10. The U.S. has the most developed venture and risk capital markets. A more strategic approach could be considered.
11. Finland should pay more attention to the huge size of the U.S. domestic market. Especially now, when the devaluation of euro has improved our domestic cost-competitiveness, the timing is right for targeted marketing.
12. The U.S. economy is more dynamic, although egalitarianism is not valued as much as here. There is a lot to learn from its dynamism.

## 6.2 The wider framework

After having been under Swedish rule for six centuries, Finland became an autonomous part of the Russian Empire in 1809. The struggle for independence bore fruit and Finland gained its independence in 1917. Ethnic, cultural and religious factors drove nation building. Ideological struggle with the emerging new ideology, namely Marxism-Leninism, that took root in the eastern neighbor, the Soviet Union, led to internal division and to a bitter civil war. As a result, democratic representation and a republican form of government triumphed.

World War II unified the nation. World War II put us between a rock and a hard place. After the Winter War, the Moscow Peace Treaty was not truly about peace. Practically attacked by the communist Soviet Union, Finland was besieged and forced to ally with Nazi Germany in the Continuation War. According to the Finnish interpretation, the war with Germany was a separate war. Finland had to choose from two bad choices and two alien ideologies.

The lesson could not be clearer. Finland must promote liberal democracy within its vicinity. It must promote a world order where disputes are settled peacefully, according to mutually agreed rules. Borders should not be redrawn by arms.

Geopolitically, Finland faces the Eurasian fault line. It also faces the question of the future of European integration.

### *The future of Europe*

European integration is crucial for Finland's success. European integration has been, as a whole, a success story. It is within the core national interests of both Finland and the U.S. to promote European stability and democratic integration.

European integration was originally a U.S. initiative and was formed to become an economic bulwark against the communist Soviet Union. After the Cold War, it became possible to extend the liberal democratic model eastward. This is still the goal.

When thinking of the future of European integration, this should be kept in mind. It is important to understand that Europe's future is linked to both the U.S. and the Eurasian question. France and Germany, the most important European powers, need assistance in shaping the European future.

The institutional framework of the EU is complex. It needs a lot of bureaucratic work to understand it, not to speak about running the system. Complex systems are ineffective. For example, the euro area was created without centralized monetary

policy relying on centralized fiscal policy. From the beginning, the rational was that difficulties, when they come, will forcefully push integration further.

The experience shows that what is economically possible may become politically difficult. Politically a European federal system seems impossible, so divergent are the national interests of European powers. The complexity of the system will consume energy and resources. The question regarding the future of integration is not solved.

My understanding is that the future of the system should be thought of in a transatlantic context. But because the integration process was about creating a bulwark against communism, the only reasonable way to look at it will be from a still wider perspective: the trans-Eurasian one.

### *The trans-Eurasian question*

Economically speaking, the vision formulated by Brzezinski offers a big possibility for Finland. And this has been the long-term goal of both the U.S. and the EU. This has been an ongoing but slow process since the end of the Cold War. However, the Ukrainian crisis revealed the fault lines.

Ultimately it comes down to values. The expansion of liberal democratic values has been a slow but steady process. For Russia, they are currently hard to accept for quite obvious reasons.

Geographically, Russia is a difficult country to govern. It has no natural land borders. Historically, the North European Plain has served as an invasion route for many powerful armies. From a Russian perspective, the western assurances of a peaceful enlargement of NATO seem like nonsense. The good intentions have been proven illusory in the past. In 1932 Germany was a peaceful liberal state. In 1939, it was something else. And this is deeply embedded in Russian memory.

An authoritarian regime is needed to keep Russia together. The economic model is based on revenues from natural resources distributed by Kremlin to the regions. To prevent centrifugal forces, buffers are needed and Ukraine is critical in this sense. The fear is that a democratic model would lead to a fragmented outcome.

So here we are. The democratic west does not want to be a threat to Russia's territorial integrity. However, this is what Russia fears. We face a dilemma that seems difficult to solve. The more Russia weakens economically, the more its current leadership feels threatened. And the more unpredictable it is likely to become.

As a non-NATO western borderland Finland is unique. Finland matters because it happens to be where it happens to be.

## 7 Appendix 1: Travel itinerary

A visit to the United States of America for:

Martti Myllylä

Government of Finland  
16 March to 10 April, 2015  
Washington, DC  
Detroit, Michigan  
Chicago, Illinois

### **Week 1, Washington:**

#### **16 March 2015**

Counselor Jukka Salminiitty, Finnish Embassy in Washington, DC.

#### **17 March 2015**

Director Brad Botwin, U.S. Department of Commerce

#### **18 March 2015**

Grand Strategy Seminar, National Defense University, Grand Strategy Conference, Room 155, Marshall Hall Auditorium

Professor Leon Fuerth, George Washington University

Leon Fuerth's assistant: Joanna Nicoletti, The Project on Forward Engagement

#### **19 March 2015**

Director Richard D. Hooker Jr., Ph.D., Director, Institute for National Strategic Studies, National Defense University, ft. Lesley J. McNair

Dr. Hooker's assistant: Kacey J. Mahoney, Research Analyst

Dr. Christopher Lamb, Distinguished Research Fellow, Institute for National Strategic Studies, National Defense University

#### **20 March 2015**

Minister-Counselor Soili Buhanist-Mäkeläinen, Finnish Embassy

### **Week 2, Washington:**

#### **23 March 2015**

Edward Alden, Bernard L. Schwartz Senior Fellow, Council on Foreign Relations

#### **24 March 2015**

Maren Leed, Ph.D., Senior Adviser, Center for Strategic and International Studies, Harold Brown Chair in Defense Policy Studies

Dr. Leed's assistant: Jaimie Hoskins, Program Coordinator

Dr. Timothy Persons, Chief Scientist, U.S. Government Accountability Office

Dr. Person's assistant: Juanita A. Aiken

Susan Offutt, Chief Economist, GAO

#### **25 March 2015**

Stephen Ezell, Director, Global Innovation Policy, The Information Technology & Innovation Foundation

Adams Nager, Economic Research Assistant

Kei Koizumi, Assistant Director for Federal R&D, the White House's Office of Science and Technology Policy

**26 March 2015**

Mr. John F. Morton, Discussion at the National Press Club

**27 March 2015**

G. Mustafa Mohatarem, Chief Economist, Public Policy Center, General Motors Company

Counselor Jukka Salminiitty, Finnish Embassy in Washington, DC.  
Vice President Tom Rauste, Finpro

**Week 3:**

**30 March 2015**

Call to Richard A. Lacquement Jr., Ph.D., U.S. Army War College, Dean, School of Strategic Landpower

**31 March 2015**

Professor Leon Fuerth, George Washington University

**1 April 2015**

Defense Counselor Pete Piirainen, Finnish Embassy in Washington, DC.  
Minister Counselor Janne Jokinen, Finnish Embassy in Washington, DC.

**2 April 2015**

Desk Officer (European affairs) Jen Levine, Department of Commerce  
Executive Director Seward L. Jones Jr  
Senior Advisor Bart Meroney (manufacturing)

**3 April 2015**

Department of Commerce, International Trade Administration, SelectUSA  
Felicia Pullam, Director of Outreach  
Alev Gunay, Senior International Investment Specialist

**Week 4:**

**6 April 2015**

Flight to Detroit

**7 April 2015**

Call to director of Strategic Planning James-Christian Blockwood, GAO

Evening event at the home of Drs. David and Sheila Ronis. Discussions with Louis J. Infante, Keith W. Cooley, and many others

**8 April 2015**

Meeting with John McElroy, Auto Industry Specialist, [www.autoline.tv](http://www.autoline.tv)

Presentation at Walsh College. Lessons learned on the topic

Flight to Chicago

**9 April 2015**

Argonne National Laboratory, Pamela J. Sydelko, Director, Systems Science Center  
Todd E. Combs, Ph.D., Division Director  
Leah B. Guzowski, Director, Strategic Programs

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