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Fleeting Equality: The relative size of the U.S. and EU economies to 2020

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In May, the European Union celebrated the accession of 10 new members. In one fell swoop, by adding their combined GDP to that of the current EU-15, Europe had finally caught up to the United States in economic size. Both economies at present have an annual income of around \$11 trillion. Their per capita incomes differ significantly, with the European Union spreading the same income over 170 million more people. Nonetheless, for symbolic as well as practical reasons, the achievement of parity between the EU and U.S. economies marks a milestone.²

This parity, however, is not going to last. Given differentials in demographics (both fertility and immigration rates) and in productivity growth that will persist for the foreseeable future, American economic growth will outstrip European growth. Absent some change in current trends, the U.S. economy will be nearly 20% bigger than the enlarged European economy in 2020. This analysis paper projects the relative sizes of the U.S., the expanded EU, and the “rest of the world” [RoW] economies out to 2020 under three scenarios—and even under the one most favorable to Europe, parity will not be maintained. While size is not all that matters as an economic determinant of international influence, and certainly is not a sufficient statistic for well-being, there is some link between relative economic size and both military capabilities and broader influence. Moreover, even though size does not equate to economic well-being, relative economic performance is seen as important among publics and politicians and has often been a source of competition in the transatlantic relationship.

Two sets of simulations are shown (see accompanying figures in the appendix). The first set of simulations projects the percentage of global GDP on an annual basis (in Purchasing Power

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² After the EU's last enlargement, the accession of Sweden, Finland and Austria in January 1995, the EU briefly achieved parity with the U.S. in size of GDP as well. At that point began the surge in U.S. productivity growth, sustained through today and unmatched by the majority of the EU, which has put the U.S. increasingly ahead of the EU-15 since then.

Parity [PPP] terms) represented by the United States, the enlarged European Union, and the rest of the world (including China and India).³ The second set projects the actual size of the U.S. and the enlarged EU economies on an annual basis (PPP) in billions of U.S. dollars.

Three scenarios are considered:

1. Baseline – The United States, enlarged European Union, and RoW, are all assumed to grow at their annual average growth rates of 1993-2003. In this case, the U.S. share of global GDP is essentially unchanged by 2020, the EU share declines by over 3%, and the RoW adds 4%. The U.S. economy more than doubles in size to \$24.6 trillion, while the EU economy goes from parity with the U.S. economy in 2003 to \$20.9 trillion (15% smaller than the United States) by 2020.
2. Demographic Determinism – The U.S. growth rate is assumed to slow down by 0.02% each year due to declining birth rates, in part due to improved income of Hispanic- and African-Americans. The EU growth rate slows down by 0.07% each year due to rapid aging of the population, which is if anything exacerbated by the accession countries. Part of the growth decline comes from the effect of aging on government budgets, and on productivity growth of meeting those budgets through increases in interest rates and distortionary taxes, with the rest coming directly through shrinkage of the labor force. The U.S. share of world GDP declines slightly by 2020, remaining just above 20%; the enlarged EU share of world GDP declines by 5% (overall global GDP grows noticeably but not disastrously more slowly than in the baseline scenario). The relative gap between the U.S. and the EU economies in 2020 is wider than in the baseline scenario, with the U.S. national income worth \$24.0 trillion, and the EU economy \$19.1 trillion (a 20% difference).
3. European Reform – The U.S. is assumed to continue to grow at its average rate of 1993-2003, but the EU growth rate is assumed to jump by 0.5% in 2008, stay that amount higher, and gain a further 0.05% a year through 2020. Under this scenario, in 2020, the EU growth rate would catch up with that of the United States. The rationale for such a scenario is that productivity is boosted from integration of the accession countries' low-wage labor forces or the results of a number of domestic reform efforts in core European economies following the upcoming election cycles. It is assumed that these benefits take a few years to be felt, but with ongoing beneficial effects. In this scenario, the U.S. and EU shares of world output decline at a slower but still noticeable pace by 2020 (the EU share from 21.3% to 18.6%; the U.S. share from 21.1% to 20.0%). The size

³ To ease computation and avoid data problems, for the enlarged EU we used the GDP of the current EU-15 plus the combined GDP of the Czech Republic, Hungary, and Poland. These three combined account for 80% of the accession countries' total GDP, and the remaining seven accession countries total roughly 1% (or less) of total EU GDP. This has little effect on the results presented.

of the EU relative to the U.S. economy goes up compared to the baseline scenario, reaching 93% of the U.S. size in 2020.

These scenarios all likely *overestimate* the relative size of growth of the RoW, including that of China and India, for two reasons. First, by measuring the economies in PPP terms, rather than in traded goods terms at multi-year average exchange rates, the scenarios tend to increase the size of developing countries' output relative to that of developed economies. PPP calculations, in their effort to better account for the value of non-tradeables, even in very low wage economies, effectively assume that producing a \$1 haircut generates as much purchasing power for the economy as producing \$1 worth of high-tech equipment for export. In fact, the high U.S. and EU share of cutting-edge technology production (relative to their share of the world economy) and their ability to borrow on world markets in their own currencies (given the greater liquid assets available to them) means they control a greater share of global income than PPP calculations of world GDP shares imply. Secondly, despite the Asian financial crisis and the travails of certain countries in recent years, the last 10 years have been years of relatively good growth in the major emerging market economies, and projecting out their ongoing growth at the average rate of the last 10 years is on the optimistic end of things (though certainly not unreasonable). This would be particularly the case for China and India, both of which have undergone unprecedented growth spurts of late that may not be sustainable indefinitely.⁴ Thus, the scenarios give a lower bound for the U.S. and EU share of the world economy.

These scenarios also likely *underestimate* the relative performance of the U.S. economy versus the EU going forward (barring reform) as well. Not only does the 1993-2003 average perhaps include some years (1993-1995) which do not reflect the recent sustained increase in the U.S. productivity growth rate, it assumes no change in current net immigration (legal or illegal) to the United States. Assuming that all aging rich societies will have to increasingly import labor, but that the United States is more likely than most European societies to allow in foreign workers (as immigrants or illegals) on a large scale, a scenario taking demographics realistically into account is likely to be worse for Europe on relative terms than the second scenario here.

Even the third (hopeful reform) scenario for Europe is probably biased upwards for Europe's prospects. While there have been some ambitious economic reform efforts undertaken in Western Europe, and a few have even been implemented, any hopes that the accession countries will provide a growth spark to the rest of Europe are likely exaggerated. The only way for income levels to converge across the expanded European Union is for productivity in the new 10 members to rise towards western levels—and that requires investment in and turnover of both human and physical capital in those countries. There has been some of that, with some public funds spent on useful infrastructure projects, some older eastern workers retrained (and more have left the workforce or retired), and an increasing though still small proportion of younger

⁴ It is worth noting that the importance of China and India to the calculation of the RoW economy is significant but not dominant. China and India combined account for roughly 19% of the global economy in PPP terms, a third of the non-U.S./EU economies' total size and less than either the United States or the European Union taken on their own (this also underlines the significance of PPP calculations which put these on a par with the United States and European Union; calculating on the basis of traded goods prices would cut their size by 2/3).

accession country citizens have received western standards of education and job experience. Nonetheless, this has been an uphill battle, given the huge initial gap in productivity levels in most of the countries (on average, at present, only 40% of the EU-15 level).

We also know that the biggest jump in convergence for transition economies tends to happen in the first few years of economic integration and liberalization. That is when the largest gains are captured, through the release of labor and savings from inefficient uses; the adoption of market incentives; the movement of capital to the most obvious investment opportunities; the higher marginal returns to the first re-employed pieces of capital and labor; the provision of needed infrastructure; and the introduction of new technologies. In other words, the biggest catch-up of eastern to western income and productivity levels has already occurred in the 1990s. In any event, the accession countries are so small in economic terms relative to the EU-15 that even growth rates a few percentage point higher on average in those countries translates into little added demand or capacity for the earlier EU members.

Despite these longer-run trends, a prolonged fall in the value of the dollar and a sharp contraction in U.S. consumption and investment cannot be ruled out and may even be likely over the next 2-5 years. At some point, the United States will have to close its trade deficits to pay back at least part of what it has borrowed from abroad over the last decade, and that will involve an exchange rate depreciation and a repatriation of some European capital invested in the United States. In the immediate aftermath, the EU economy would shoot up in size relative to the U.S. economy, at least when measured by contemporary exchange rates. But such an event is likely to also harm EU growth significantly, given the share of European GDP exported to the United States. In fact, it is the very unattractiveness of European production and investment relative to the United States that underpins the consistent net surplus position of the European Union vis-à-vis the United States in the balance of payments. If Europe's own trend growth rate were to converge upon that of the United States, then these imbalances would be reduced, and the need for the United States to 'adjust' (i.e., start exporting and saving more, importing and spending less) would be less drastic. In short, a balance of payments problem or dollar crash in the near-term would do little to change the relative size or growth differential of the United States and the European Union, though it would in all likelihood drive down the average growth rate for both economies.

Does apparently inevitable relative decline of the size of EU economy versus that of the U.S. matter for transatlantic relations? In three senses, it probably does.

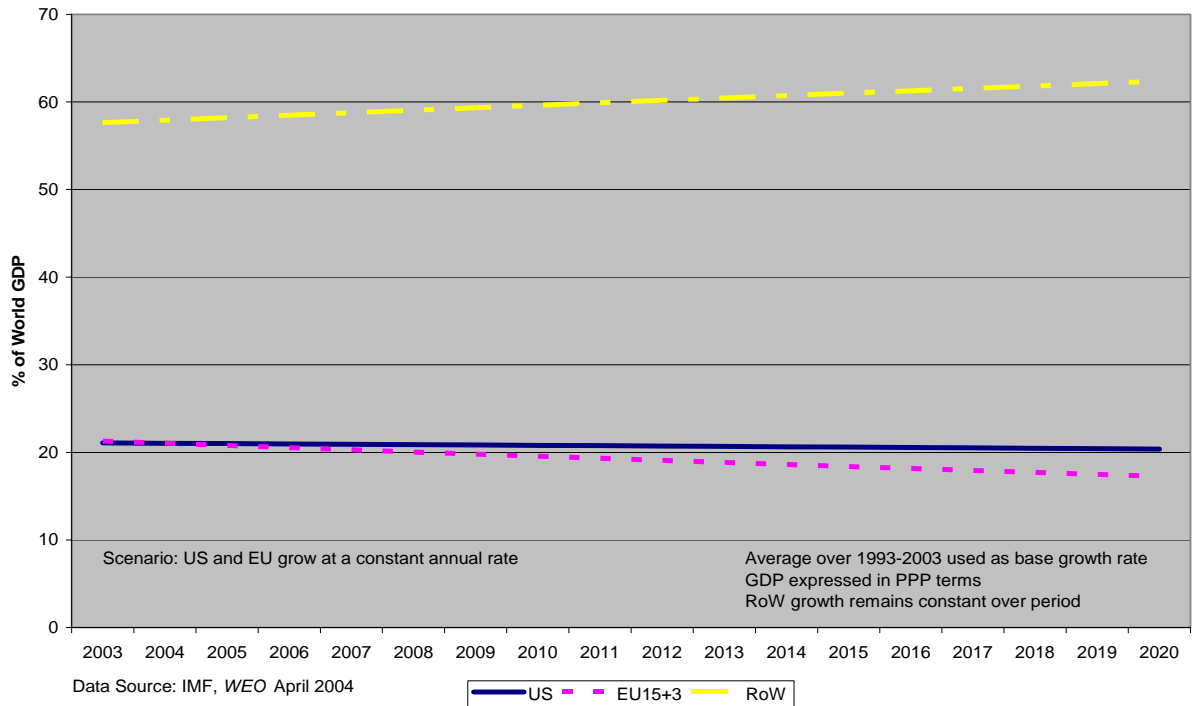
1. Military spending – Currently, the United States spends more than the enlarged European Union combined on military personnel and equipment. Unquestionably, military spending is seen as more of a discretionary budget category among European politicians than among their American counterparts, and factors having nothing to do with spending levels (e.g., Germany's potential decision to convert from a conscript to professional military force) will play important roles in determining European capabilities. Nonetheless, if spending on entitlements for the aged will be increasing, or difficult budget battles will be fought in Europe to limit that entitlement growth, while the United States grows in size versus the European Union, the defense spending gap between Europe and the United States will widen. This will deepen current debates over burden

sharing, the substitutability of non-military expenditures for foreign policy or alliance efforts, and the sustenance of domestic arms production.

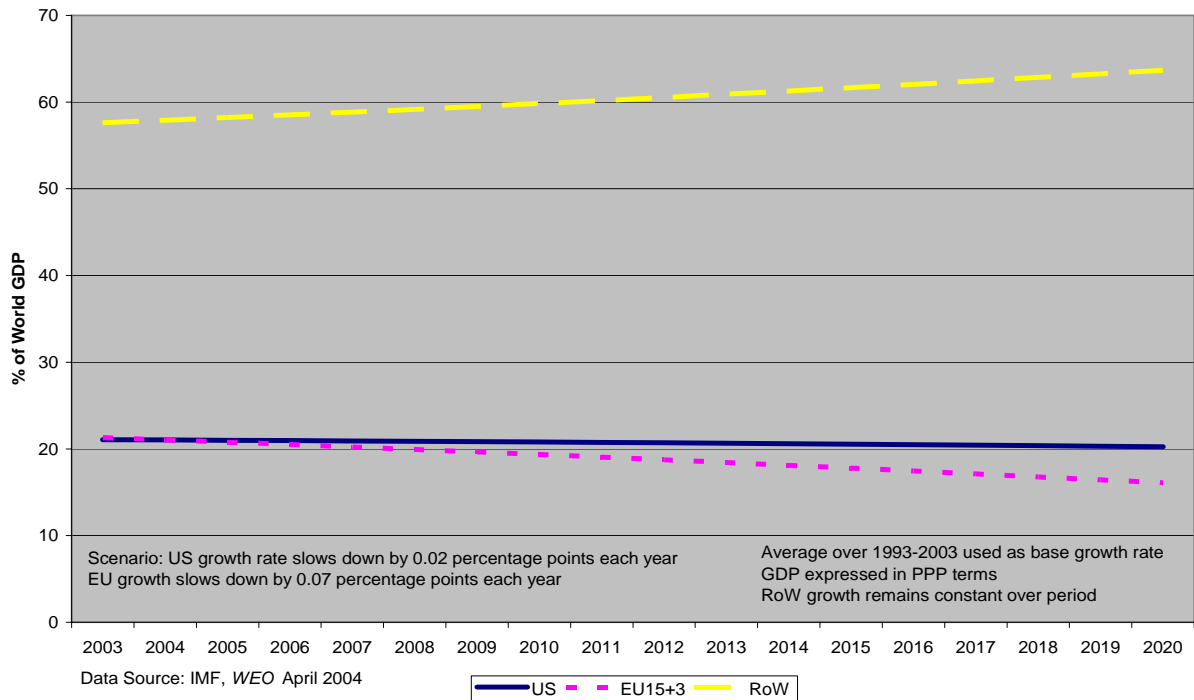
2. International representation – The European Union is currently over-represented in the major international financial institutions, such as the World Bank and the International Monetary Fund. Quotas (of money on account) and voting percentages are supposed to reflect the relative size of member economies, but Europe has both higher quotas and more influence (via the constituency system) than its size merits. The creation of the euro makes a strong argument for a reorganization of voting such that the eurozone, if not the entire EU, should vote as a bloc in these institutions. Given the relative decline in European size not only vis-à-vis the United States, but also the RoW, the consolidation of European votes will likely provide the opening for a shrinking of total EU votes. European resistance to such a shrinking will slow alignment of the eurozone’s external and internal roles, and thus Europe’s ability to respond in a rapid, unified fashion to financial crises.
3. Mutual understanding of economic situations – Overall size of the economy is not the same as per capita quality of life. For many Europeans, their income, and, for many more, their effective standard of living, is more than comparable to that of most American citizens. Even if per capita income is not comparable across the Atlantic for most of the EU-15, let alone the accession countries, differences in growth rates can reflect in part different societal preferences about leisure or the use of public space or the willingness to take risks. Yet, inevitably, politicians and mass publics will refer to comparative economic statistics in terms of ‘competitiveness’ (e.g., the European Union’s self-proclaimed Lisbon goals “of becoming the most competitive and knowledge-based economy in the world by 2010.”) Thus, the European Union’s apparent shortfall in keeping up with the United States will only fuel rhetoric about competition between ‘economic systems,’ with a likely return to the claims that America’s faster growth reflects its greater willingness to tolerate inequality (or as some *laissez-faire* advocates put it, to promote opportunity and mobility). This will likely further fuel transatlantic economic disputes over standards, trade, technology, and protection of national champions. This dynamic of misunderstanding may also feed self-destructive economic policies on both sides of the Atlantic by exaggerating the tension between provision of a social safety net and growth—particularly when enlargement will bring a diversity of income and ethnicity to Europe unprecedented in its modern history.

APPENDIX

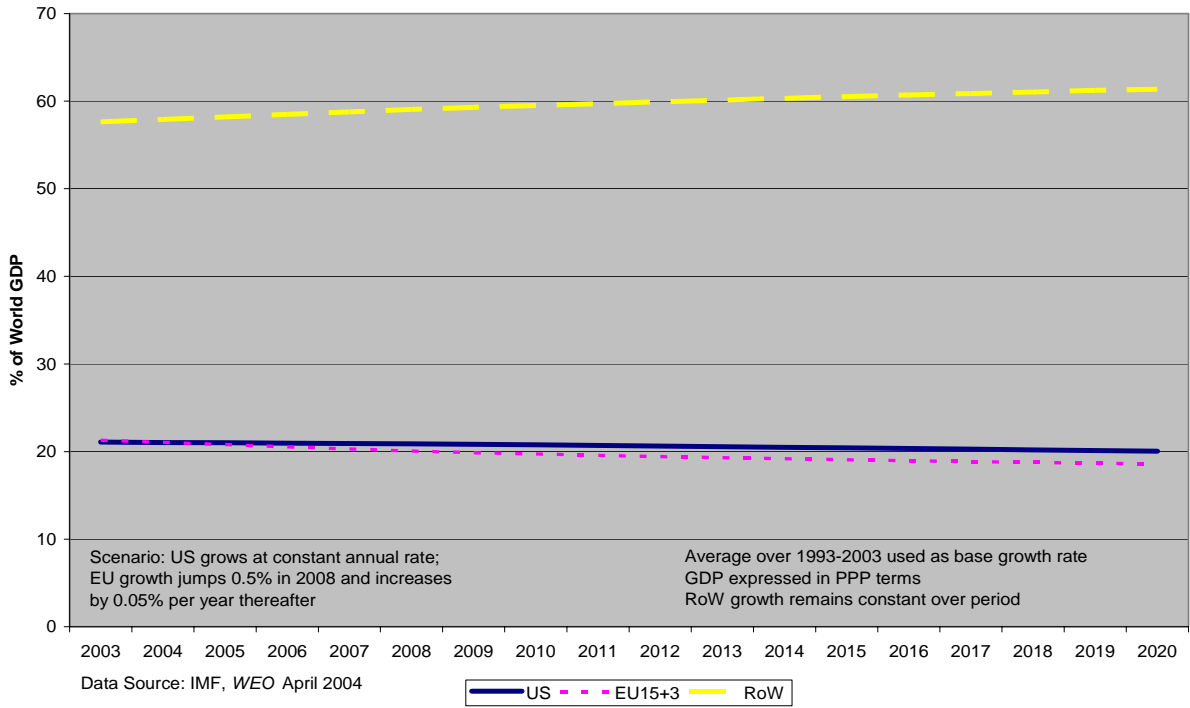
Share of Total World GDP - Base Scenario



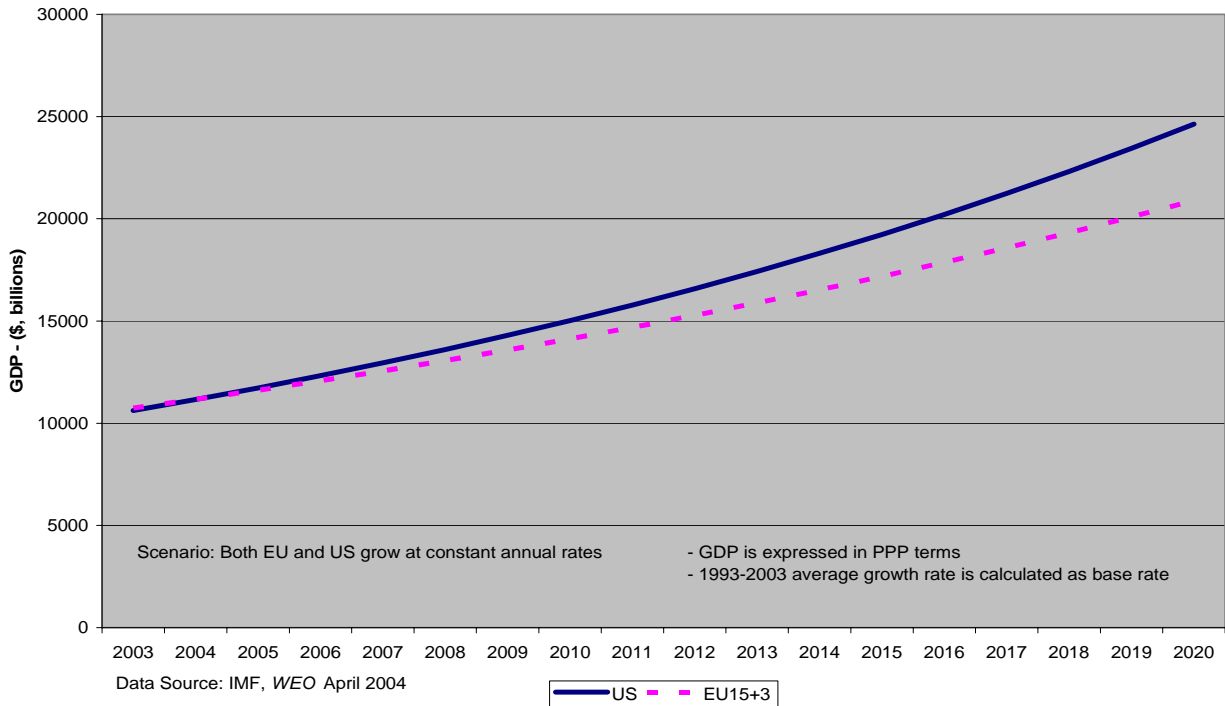
Share of Total World GDP - Demographic Determinism Scenario



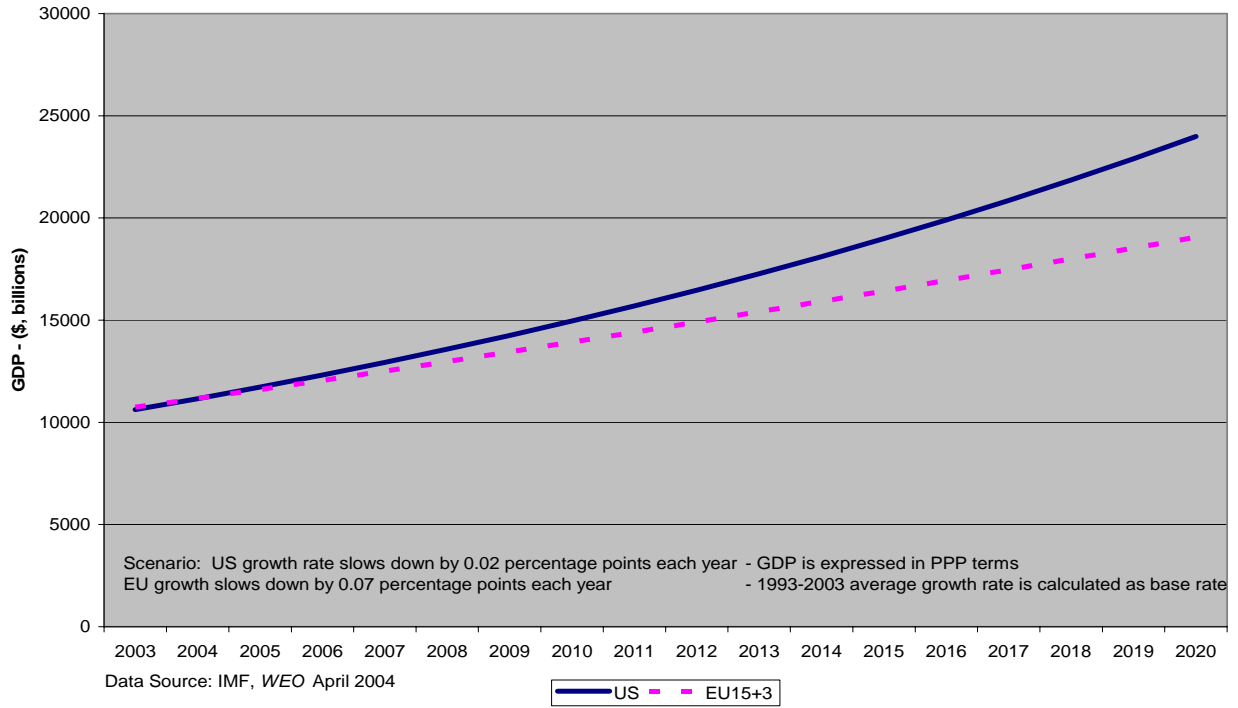
Share of Total World GDP - European Reform Scenario



Relative Size of EU and US Economies - Base Scenario



Relative Size of US and EU Economies - Demographic Determinism Scenario



Relative Size of US and EU Economies - European Reform Scenario

