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TRANSATLANTIC PROGRAM OF



FOREWORD

The U.S. elections in 2012 and the German elections in 2013 demonstrate that, despite their geographic distance, the two countries are confronted by both similar and shared problems: debt crises, unemployment, instability in the Middle East, immigration, energy security, education, and counter-terrorism efforts, to name only a few. National elections offer an opportunity to engage the broader electorate in the policy process, and take the temperature of the country.

On both sides of the Atlantic, voters have revealed a varied outlook. The 2012 election in the U.S. resulted in a divided government, which has engaged in political fights and brinksmanship—seen most recently in October's government shutdown. Meanwhile, the September 22, 2013, election in Germany was a resounding success for Chancellor Angela Merkel and her conservative party, but without a clear coalition partner, the three-term chancellor is stuck in a holding pattern until coalition negotiations can be completed.

Despite our domestic political situations, the global economy marches on, and markets are eager for both Americans and Germans to get their houses in order. The uncertainty related to the U.S. debt ceiling debate and the banking reform underway in the European Union demonstrate the need for political leadership.

While policymakers strive to enact economic, domestic, and foreign policy and legislation that can pass a divided government, they are confronted by the reality of a changing electorate. The younger generation is playing an increasingly active role in elections, as they mobilize through new technology and try to gain a foothold in the world market. Fostering a new generation of leaders invested in the German-American relationship will be crucial for our ability to confront new global challenges as they emerge, be it competing in the twenty-first century marketplace or adapting to new cyber threats.

Part of gaining a foothold in the world market—and encouraging economic growth—is evaluating the way we train workers, and determining how different training and apprenticeship models are successful at alleviating unemployment. While the U.S. education model has left many workers underprepared for twenty-first century jobs, some companies are looking to Germany for solutions. Whether this is extended academic training in conjunction with technology use and training, or on-the-job practical skills training, innovation in education will allow the next generation to be better prepared for economic and security challenges. This will have ramifications for elections, as a better-trained workforce offers more economic power and changes its demands of policymakers.

The temptation to look inward and focus only on domestic concerns certainly exists, but does not reflect the reality of our interconnected world. One such reality is the case of cyber security. Attacks against national and private interests in the borderless realm of cyberspace over the past few years have spurred international efforts to defend critical information infrastructures. The ongoing debate reflects a difference in perception of shared values between the U.S. and Germany—a perception in which theory does not necessarily match practice. The transatlantic relationship will be essential to address the threat of cyber attacks, and must determine a common ground on something that so intricately intertwines the nations on both sides of the Atlantic.

The elections in 2012 and 2013 demonstrate that we are on the cusp of dramatic changes on both sides of the ocean, with political, economic, social, and security challenges evolving from our earlier understanding. The United States and Germany must make difficult choices—choices that will have consequences beyond the German-American partnership. This publication offers insights for policymakers and leaders in both countries seeking to shape transatlantic solutions to global problems.

AICGS is grateful to the sponsors of this report, the Transatlantic Program of the Government of the Federal Republic of Germany through Funds of the European Recovery Program (ERP) of the Federal Ministry of Economics and Technology and Skadden, Arps, Slate, Meagher & Flom LLP & Affiliates, for their generous support. We are also grateful to the authors for sharing their insights on issues of such transatlantic importance.

Jackson Janes President, AICGS

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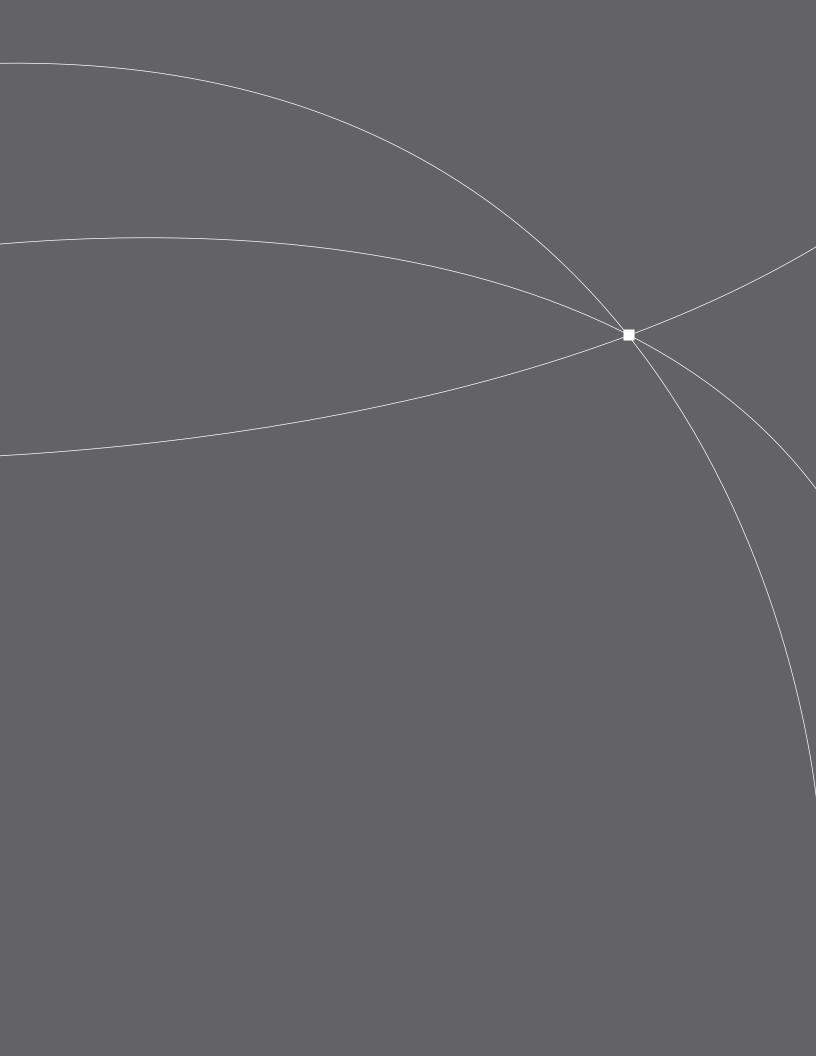
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GOVERNING ACROSS THE ATLANTIC: COMMON CHALLENGES AND CHOICES

JACKSON JANES



The German-American relationship has always been more than a sum of its parts. That did not and will not change after Germany's election.

Similarities and Differences

Germans and Americans have much in common in their political systems: strong federal states, bicameral legislatures, healthy democracies. They have national elections every four years, resulting in alternating political parties in majorities and minorities and peaceful transitions of power. They have intense debates—primarily on domestic issues, but also on contentious foreign policy concerns—during their campaigns. Their citizens are active in the political process (although voter turnout is higher in Germany than in the U.S.).

Where the two countries differ is in their political parties. Germans operate in a parliamentary system, with multiple parties represented in the Bundestag. Any party that receives 5 percent of the vote may hold a seat in the lower chamber, resulting in a spectrum of parties and the need for governing coalitions. Conversely, Americans choose primarily between two political parties for Congress and the White House, directly electing the House of Representatives and a third of the Senate every two years. Direct elections can result in split government, with the House and Senate controlled by opposing parties or the White House in opposition.

Many of the issues Germans and Americans debate are similar, be they about taxes, regulatory policies, immigration, or the role and responsibilities of government in dealing with challenges and choices facing the country. They range from the domestic to the international, from economic to security, and exemplify the necessity of the transatlantic relationship.

Shaping Challenges and Choices

In the past few years, there has been more of a focus on the challenges facing democratic governments. Forging consensus and compromise is the essence of a democracy, but that has become increasingly difficult to achieve. Governing is proving to be problematic, as can be seen with the government shutdown in the U.S. and coalition negotiations in Germany.

In the U.S., there is an increasing trend toward a fracturing of the electorate into single interest groups and across political and cultural divisions. The government shutdown was a case study of political gridlock. The results of the 2012 presidential election have been followed by more clashes over health care and debt policies, and the front lines of the battles have been hardening as preparations begin for the midterm elections in 2014. Foreign policy has also been a political target, from the fallout from the Bengazi

attack to the crisis in Syria to dealings with Iran.

Meanwhile, Germans are watching their leaders try to form a new coalition government—not an easy puzzle to solve. The interesting difference is that there appears to be a broader consensus among Germans as to how one can approach challenges and choices.

Germans do not buy the zero-sum thinking that government and markets—or liberty and equality—cannot be pursued jointly. They argue about the same issues Americans face—how much social, how much market, and how much government—but their starting point is that all three should be working together: capitalism with a strong welfare dimension steered by a government that is an ally, not the enemy. Shaping these choices in this way shapes the consequences of elections and policies.

Germany's election results on September 22 are having ripple effects throughout all of the political parties, and could well reshape the landscape of the Bundestag in many ways. The complicated process of constructing a platform for any governing coalition is going to be difficult and will take many weeks to complete. Germany will be fortunate if it has a functioning government by the time Christmas has arrived.

Even though the likely outcome of the negotiations will be a coalition between the Christian Democratic Union (CDU), the Christian Social Union (CSU), and the Social Democratic Party (SPD), there are any number of wrenches that can be thrown into the machinery at any point. For example, the Social Democrats have decided that they will negotiate with Chancellor Angela Merkel to see whether they can reach an agreement on a platform, but then they will present that platform to the membership of the SPD for a referendum. Should the membership vote against the proposed platform, it will throw the current SPD leadership into a tail spin and could torpedo negotiations. That move also makes it difficult for Merkel to negotiate with the SPD.

As far as the chancellor is concerned, she may have a stronger hand to sell her platform to her own constituencies, given the election victory she just achieved. Yet, she must also consider her sister party, the CSU, which is going to make the process of reaching agreement with the Social Democrats no easy task. Since the leader of the CSU in Bavaria, Horst Seehofer, just won an absolute majority in his state election, he is sowing his political oats, and there is already a clash looming over a number of issues, including a hard clash with the Social Democrats over taxes.

Apart from how long this poker process might last, the time it will take these three parties to agree remains a highly speculative question as well. The threat of using a stalemate with the SPD to suggest that the chancellor could form a coalition with the Green Party is a most unlikely scenario. Part of that problem concerns the Green Party's readiness to forge such a platform given its own leadership turmoil. A second difficulty is the fact that bridging the gap between the CSU and the Greens at this point would be almost impossible. That might not be the case in four years or possibly eight, but right now, it does not seem to be in the cards.

With the Free Democratic Party (FDP) having been tossed out of the parliament after failing to reach the 5 percent threshold, there are only five parties to be represented in the Bundestag. The plight of the FDP remains uncertain. The liberal party's mission and message is tarnished by its inability to persuade voters of its relevance despite its almost permanent presence in government during past decades. Rebranding itself will require new leadership, as well as recruiting support among those groups now disappointed with its performance. The FDP is in a weak position among state governments as well, where it is currently represented in only one state government: Saxony.

If a so-called grand coalition does come about, both the Greens and the Left Party will be in the opposition. In an ironic twist of election results, the Left Party got a slightly greater percentage of voters in the election, leaving it with one more seat in the Bundestag. That means that the leader of the Left Party, Gregor Gysi, will have an enhanced platform in responding to the governing coalition, assuming it is the CDU/CSU and SPD.

It will be interesting to see how these two small opposition parties use their time to position themselves for

the next round of elections in 2017. The fact that a large coalition will claim over 70 percent of the members of the Bundestag could lead to a louder voice for smaller parties shouting about the fact that they have been shut out of the legislative process by this supermajority. That can happen on either end of the spectrum. Witness the emergence of the so-called "Alternative for Germany" (AfD) on the right, which just missed the 5 percent hurdle into the parliament. The discomfort many Germans feel with the role Germany is playing in the euro zone continues to fester, and this new upstart group offers an outlet that may not disappear quickly. Look for this party to appear again in the European Parliament next spring after the elections.

Other party changes are also possible. Some observers predict that the SPD might choose to form a coalition with the two small left-of-center parties in the coming years, even earlier than 2017. While both the SPD leadership and the Greens have emphatically said that the Left Party is not a viable coalition partner now, the evolution of the Left Party could eventually lead in a different direction. The fact is that the three left-of-center parties would already have a majority in the Bundestag, were they to combine forces now. But that is not going to happen: the Left Party's positions—particularly on foreign policy issues—are not acceptable to the Social Democrats or the Greens. In addition, there are many Social Democrats who do not wish to work with a party they associate with its heritage in the German Democratic Republic.

Finally, the SPD suffered its worst electoral loss in 2009, receiving only 23 percent of the votes. But this year they suffered their second worst result of only slightly more than 25 percent, while Merkel's party hit a record high of 41.5 percent—just missing an absolute majority in the Bundestag. Of course, the SPD knows Merkel needs a partner, and the Social Democrats also know that they have a good deal of influence in the upper chamber of the parliament, where the majority of the sixteen states have the SPD in governing coalitions. Assuming that the larger coalition emerges, much will depend on Merkel's ability to steer it, as she managed to do so well between 2005 and 2009.

But governing today in any democracy is a huge challenge no matter the combination of leaders and political persuasion in power at any given time. One need only take a good look at the current crisis in Washington, DC emerging over the trenches of political warfare to grasp what happens when political players devote more time to posturing, pontificating, and effectively punishing both the voters and the legislative process with the results.

German politicians are seriously and vigorously debating similar hard-edged questions about debt and deficits, how to make government work better, and the role of responsibilities of both the state and the individual. But they are not standing across from each other as perceived enemies. There is a larger framework in which these debates take place-a framework that derives from a shared consensus about striving for the best equation between responsible government and equally responsible citizens. While they know they have problems to solve, the Germans have done pretty well with this debate so far. They have also engaged in it without excessive hyperbolic tantrums, largely because the German citizens expect as much. In fact, Germans look across the Atlantic at their counterparts in Washington right now and wonder how such polarization can take over and threaten to shut down the government of the most powerful country in the world.

A Joint Agenda for 2014 and Beyond

Regardless of how the governing coalition is put together after Germany's September 22 federal election, Chancellor Merkel will be faced with a transatlantic agenda that looks very familiar. While the players in Berlin may be shuffled, and some may be new to the arena of government, the U.S.-German dialogue will carry on, and the parameters of challenges and choices will not change a great deal. What's more, the primary political players on the German stage do not differ significantly in their approaches to transatlantic issues, and the central importance of relations with the United States is a given for the mainstream parties.

However, that does not always translate into agreement on specific policy choices. There are a number of areas of potential tension in future U.S.-German

relations:

- Many stakeholders on both sides of the Atlantic would like to see negotiations over the Transatlantic Trade and Investment Partnership (TTIP) initiative move forward.
- The backlash to the U.S. National Security Agency's (NSA) extensive surveillance program of both American allies and foes continues among Germans, who are especially sensitive to these issues given their historical experience with surveillance policies in the former East Germany and during the Nazi era. The whole affair has generated a good deal of public hostility toward Washington.

Angela Merkel has been trying to argue that the NSA issue is something that needs clarification but should not be used to block transatlantic trade interests. By all accounts, this will be a long-term challenge that both Germany and the United States must confront.

■ There is a trend toward inward-looking political concerns on both sides of the Atlantic. The United States is going through a phase of increasing domestic preoccupation with isolationist tendencies, and that has implications for U.S. foreign policy capacities and perceptions. For their part, Germans are primarily concerned with their own future and with the stability of their European environment.

These twin trends can raise serious questions about mutual expectations when it comes to setting policy priorities. Recent experiences, such as the clash over dealing with Libya or the handling of the euro crisis, illustrate differences over choices.

But Berlin and Washington also realize that there is an enormous web of economic and strategic interdependence that envelops the transatlantic network. The transatlantic relationship has no equal, be it measured in economic, political, or trade terms or by the daily travel and close connections across the Atlantic every day.

Going forward, German and American leaders will have to forge common responses to serious challenges, some well beyond the transatlantic arena, while maintaining public support at home. A glance at the Middle East, Africa, or other areas of concern reminds Berlin and Washington that they share global responsibilities and the need to respond to them. This is a message that leaders on both sides of the ocean need to convey to their respective voters and to each other.

Consider the status of the euro and the economic outlook in Europe. Germany's role in these issues is decisive, and the United States has an enormous stake in the stability of the euro and in continued growth in the euro area in terms of its own economic outlook. Merkel has spent the last four years of her tenure steering through the economic storms in Europe; now reelected she will continue to make that her top priority.

U.S. expectations of German leadership in this arena will be high, but in the past few years, the United States and Germany have clashed. Tensions have surfaced over Berlin's regulatory policies and its policy priorities in responding to the crises in Europe. Those tensions have also affected Germany's relations with its European neighbors. The U.S.-German dialogue in this area will at times be difficult, especially in light of divergent perspectives on the role of monetary and fiscal policies and because Germany operates within the complex EU arena, which impacts its choices and their consequences.

Then there is the still-unfolding civil war in Syria and the potential response to the use of chemical weapons there. Any coalition government in Berlin will seek to avoid German military engagement in the region, but the United States will expect German political support should the crisis escalate.

Washington will also seek Berlin's help when dealing with Moscow. Because Germany's relations with Russia are the most extensive in Europe, Washington needs Berlin in discussions with Moscow about bringing an end to the conflict in Syria. The United States and Germany will need to coordinate their policies toward Russia, especially given its domestic slide toward autocracy.

And Germany is China's most important economic partner in Europe. This connection is key to the United States given that relations between Beijing and

Washington are defined by competition and interdependence. Germany and the United States will need to discuss a common approach to the emergence of China on the global stage.

Of course, the existence of common interests does not guarantee that Berlin and Washington will find common ground in all areas of shared concern. Since the fall of the Berlin Wall, Germany has become a subject of U.S. foreign policy rather than the object it was during the Cold War. Berlin is increasingly finding its own way. It is confronting new choices and adjusting to a changing role in Europe and in the world with the more frequent—but cautious—use of its influence and interests.

However difficult it is to work together on tackling specific agenda items, there is an overlapping consensus that the sum of German-American relations has been more than its parts. For nearly seven decades, the United States and Germany have managed to manage their relations fairly well. That did not and will not change after Germany's election.

Additional Analysis on aicgs.org:

- "German Democracy Illustrated: The Craft of Forging Consensus," by Jackson Janes (30 September 2013).
- Interview with Ambassador Wolfgang Ischinger on Germany's Responsibilities in Foreign Policy and Security Cooperation (17 October 2013).
- "Business as Usual for German-American Relations," by Jackson Janes (18 September 2013).

AFTER THE GERMAN ELECTION: FROM STABILIZATION TO EUROPEAN RECOVERY

ALEXANDER PRIVITERA

We are in better shape. We will have a reality check next year.

The banking union is really the single most important step since the introduction of the euro. It is very important that we get it right.

Dr. Andreas Dombret, Executive Board Member, Bundesbank



The triumph of Chancellor Angela Merkel at the German polls on September 22 sets the stage for a new phase in the struggle to repair and overhaul the euro zone. The common currency has managed to avoid a new existential crisis, but progress in 2013 was uneven, and the danger of political and economic fragmentation has not been overcome. While the German vote represents a ringing endorsement of Merkel's euro zone crisis management, German citizens voted for Merkel's signature condition-based, step-by-step approach to Europe, not for an ambitious master plan.

Merkel, and an increasing number of European governments, seem to have accepted the notion that deepened economic cooperation will be sufficient to address current and future challenges. Crisis fatigue is greatly reducing the political will to move in the direction of political union. However, failure to address the European Union's institutional weaknesses could once again expose unresolved structural deficits in the governance structure of the euro area and force the European Central Bank (ECB) to play an even bigger role, and so exposing the Bank to growing criticism. The ECB cannot and should not be expected by EU member governments to continue to offset the lack of political will with unconventional monetary tools.

The current behavioral pattern that has seen European institutions, particularly the ECB and the Commission, pressured both implicitly and explicitly by member countries to enforce decisions that are a hard sell with domestic audiences, needs to be overcome. European institutions have become convenient proxies for national governments. As a consequence, the democratic deficit in most European institutions is growing.

Agenda 2014

The difficulties in speeding up institutional overhaul, coupled with a very fragile recovery, make for an interesting and potentially destabilizing mix at the end of 2013 and into 2014. Ireland and Portugal will soon try to regain full access to bond markets—it is unclear if this will occur with or without the help of the ECB's OMT (Outright Monetary Transactions)—while Greece will probably need more help from the official sector, likely in the form of an OSI (Official Sector Involvement, the restructuring of the debt held by governments and international institutions).

In May 2014, Europeans will be asked to elect a new European Parliament. By the end of the year, European political leaders have to choose a new EU Commission. The selection of a new Commission president will force governments to reveal how they

view the future role of the institution itself. They have to decide whether they are working toward the goal of a stronger Commission, and want to turn it into a democratically accountable European government (a political fantasy today but perhaps less so in a few years) or whether they are content to stick to the present division of labor, which has marginalized the role of the Commission as an enforcer of decisions made at the intergovernmental level by the European Council, composed of heads of state and government.

Since member states are unlikely to give up their minimalistic approach to building a political union, in the coming year, we expect EU leaders to make progress on four issues:

- They will look for ways to revitalize growth in the periphery of Europe, in order to eliminate any lingering doubts about the debt sustainability of some euro area member countries and to urgently reduce unemployment, especially among young people.
- They will try to agree on so-called reform contracts between member states and central authorities, the Commission in particular. These contracts would set specific targets in order to achieve better rates of growth. Countries would submit a list of binding structural reforms to the Commission for review. Hence, the existing rules-based approach to budget discipline would be extended to all areas of national economic policies. In return, European institutions could provide some limited funding for specific projects to member states.
- They will address funding gaps for program countries.
- They will try to complete the architecture of the banking union and finally agree on a credible resolution mechanism for failing banks.

Unfortunately, there is still no clear framework for more ambitious growth policies designed to revive hard-hit economies and fight the plague of unemployment. Enforcing rigid structural reforms through so-called reform contracts would not provide an easy answer. It would not only be politically very sensitive to agree to such contracts, implementing them could

also have an adverse effect on growth, at the very least in the short term. Given ongoing fiscal constraints and rather timid structural reforms in some of the countries most affected by the crisis, any stimulative measures will be limited in size. The impact on the real economy is likely to be marginal, and indeed largely symbolic. The European recovery is largely dependent on exogenous factors. It is dependent on global growth.

Completing the banking union is altogether much more consequential. It is a test for the EU and particularly for the new German government. The banking union is both the prerequisite for a healthier credit sector, and the beginning of a truly symmetric transfer of sovereignty to Europe for all countries, including Germany. While the intricacies of the banking union are difficult to explain, a firm commitment to a full banking union would send a powerful message to European policymakers about Germany's willingness to build stronger foundations for the euro zone.

However, sharing national control over banks also means sharing liabilities. Although the banking union is a significant step in the direction of a fiscal union, the German government continues to resist any transfer of additional power to centralized institutions in Brussels that could potentially put an additional burden on German taxpayers. There is the risk that European leaders could settle for a "banking union light," which would fail to sever the link between banks and their sovereigns, and would largely continue to rely on national authorities. Jörg Asmussen, executive member of the ECB, warns that a national approach to banks carries enormous risks for taxpayers. "They implicitly subsidize national banks in good times, explicitly subsidize them in bad times, and commit suicide in times of crisis."1

There is a growing temptation in Europe to take time and wait. Growing complacency is the unintended side effect of ECB president Mario Draghi's promise to "do whatever it takes" to save the euro zone. The new normal in the common currency is one of "controlled volatility," a grey area in which nothing is really fundamentally solved but existential threats appear to have receded.

The New Normal: OMT and Controlled Volatility

The past weeks offered a perfect example of this state of affairs. Despite what in early October 2013 appeared to be a deepening political crisis in Italy, the third largest economy in the euro zone, markets' reaction at no time suggested that things might spiral out of control. When, on October 2, he was asked to explain why the euro zone was not experiencing significant turbulence anymore, Draghi offered three explanations:

- Adjustments. Most countries have made significant fiscal and structural adjustments and are better equipped to weather new challenges.
- Outright Monetary Transactions (OMT). The promise to "do whatever it takes" to preserve the euro zone has eliminated the risk of redenomination, i.e., the sudden breakup of the common currency.
- Governance. The euro area governance structure has improved. Europe can better react to market volatility and sudden, sustained market pressure on one or more of its member countries.

Draghi conveniently neglected to cite the nascent recovery, which he still considers too "weak, fragile, and uneven." Of these factors, two—adjustments and governance—should be viewed as works in progress. Only one, OMT, truly represents a credible deterrent to speculative attacks against the existence of the euro itself.

What continues to make OMT credible is the ECB's threat to buy unlimited quantities of sovereign bonds. If the program were to be scrapped or even limited in size and scope—at the time of writing, the German constitutional court still needs to rule on the constitutionality of OMT—the ECB's credibility as the de facto lender of last resort for the euro zone would be severely undermined. Redenomination risk in the euro zone could make a powerful comeback, and the effects would be devastating. The tentative and very partial revival of private sector cross-border financial flows in Europe would swing into reverse. Credit supply in the periphery of the euro zone—already scarce by historical standards—would be negatively

affected and some nations would likely be pushed back into deep recession. Against this backdrop, self-fulfilling runs could emerge—investors could decide to target the sovereign bonds of one or more euro zone members, thereby jeopardizing once again the stability and very existence of the monetary union. OMT was designed as a powerful deterrent. So far, it has achieved its primary objective. But it has only bought time—time that political leaders are increasingly reluctant to use.

While fiscal adjustments are well under way, in many countries structural reforms are either incomplete or have barely started. The evolution of the crisis has shown, once again, that it is easier for politicians to raise taxes and impose austerity under intense market pressure than to implement structural reforms in a relatively benign environment.

The Banking Union and Loose Monetary Policies

The ECB is set to become the Single Supervisor of the biggest European banks in the second half of 2014. The success of this process is contingent upon shared political willingness to provide the necessary financial backstops for the assessment of the strengths and weaknesses of credit institutions that the ECB and the European Banking Authority (EBA) are due to undertake with the asset quality review of banks (AQR) and a new round of stress tests in the coming year. Repairing the European banking system is a huge task. It will take time. A thorough and credible examination of banks' balance sheets could unlock private capital injections into banks that are currently perceived as undervalued. However, if the process lacks credibility, the situation in Europe could once again worsen. At the very least, private investors would remain reluctant to put their money into troubled institutions and economies.

Indeed, the vulnerability of banks is one of the root causes of the anemic recovery in the periphery of Europe. Funding for small and medium sized enterprises (SMEs) still largely depends on bank credit. Without stronger banks, growth will remain weak.

The ECB has failed to spur lending through the longer term refinancing operations (LTROs), launched in late

2011 and early 2012, tasked with addressing funding difficulties of banks. The central bank provided cheap liquidity to euro area credit institutions at a very low fixed interest rate. But instead of passing that liquidity to consumers and companies through loans, banks in the periphery often purchased government bonds of their home country, thereby engaging in a form of carry trade that made them even more vulnerable to shocks in the event that the sovereign bonds came under renewed market pressure. This is particularly evident in the case of Italian banks, which represent the biggest takers of cheap euro zone liquidity. As of the end of June 2013, they had borrowed a total of €255 billion and had only repaid €3.5 billion, the lowest level of repayment across Europe. In 2010, before the crisis had spread to Italy, the ratio of domestic versus non-resident ownership of Italian sovereign debt stood at around 55/45. It is now close to 70/30. This means that instead of weakening the negative feedback loop between banks and their sovereigns, the unintended consequence of the LTROs was that credit institutions in some peripheral countries are now even more closely entangled with their own sovereigns. That makes it hard to exit ultraloose monetary policies.

"A sound financial system is a necessary condition for an orderly exit from ultra-loose monetary policies," explains ECB executive board member Benoît Coeuré, adding, "hence the importance of a swift implementation of the banking union in the euro area." As long as European politicians continue to debate what form the banking union should take, the ECB will have to remain very accommodative in its monetary policy stance.

Indeed, in order to signal to markets that the ECB will not raise interest rates for the foreseeable future, the governing council has introduced a new communication tool, forward guidance. Such policy is part of an attempt by the ECB to smooth the transition into the new regulatory regime and to keep interest rates low. The goal is to avoid further disruptions to credit flows and to encourage lending.

Asked recently by a reporter whether he thought that credit conditions would only improve once the ECB takes up the role of Single Supervisor in late 2014, Mario Draghi replied that it would be a disaster if that

were the case. It is clear that an agreement on the future shape of the banking union would send a powerful signal to investors. The more ambitious the deal on financial backstops and the future SRM, the easier it will be for euro zone banks to attract private capital and repair their balance sheets. Thus, completing the banking union is not a matter of choice but rather of urgency.

Institutional Shifts

But the need to get the right architecture for the banking union in place should not be viewed as the end goal. Rather, it is an important part of a transition toward a stronger, more integrated European Union. The crisis has politically weakened the Commission, which is viewed negatively by the citizens of many member countries, as well as by the German government. The Merkel government sees the role of the Commission as an enforcer of rules dictated by the European Council, the intergovernmental body of the EU. When the Commission makes legislative proposals—one of its main tasks—and acts politically, it is met by open and often scathing criticism from the German government. We should expect the next Commission to be as weak as the present one. Senior German government officials now openly speak of wanting more Europe, but less Brussels. Angela Merkel will likely try to keep the Commission on a very short leash.

The European Parliament is not yet accepted as a fully representative body of the European populace, not by European citizens or by member states. This greatly reduces the impact of the Parliament as the forum for European public debate from which a common political will could emerge. This is unlikely to change with the European elections in May. We might actually witness a strong showing for anti-European forces. The anti-euro party in Germany, Alternative for Germany (AfD), is likely to join the growing ranks of euro skeptics from other member countries represented in the EP. Whether these forces will be able to form a common platform that goes beyond the generic rejection of the euro remains to be seen.

What is clear, however, is that the intergovernmental approach continues to gain ground. National coordination is at the forefront of stabilization efforts. Indeed,

in order to address the need to revitalize growth in the periphery of Europe, Merkel could make a new push for binding reform contracts between member states and the EU.

A few final words on a new European institution that was born out of the crisis and that embodies Merkel's approach to Europe: the European Stability Mechanism. The ESM is the permanent bailout fund for sovereigns, a new technocratic body closely controlled by its stakeholders (member states). This hybrid construction is a reflection of the chancellor's determination to prevent the demise of the euro, and of her reluctance to give up Germany's veto power on stabilization efforts.

The ongoing negotiations on the banking union are likely to lead to a further strengthening of the ESM; it could see its duties expanded in the very near future. The fund will be able to recapitalize banks directly once the ECB becomes the Single Supervisor of banks. But it could also become an even more important part of the resolution mechanism for the banking union that euro zone governments are currently trying to establish. With its maximum lending capacity of €500 billion, the ESM does not have unlimited firepower to save sovereigns or banks. But it represents the key to accessing the unlimited firepower of the ECB. Through the ESM, member states (and Germany in particular) provide political cover for the ECB's governing council to "do whatever it takes" to keep the common currency area intact.

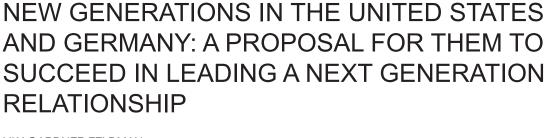
Having triumphed at the German polls in September 2013, the year 2014 could finally prove whether Merkel's view of and approach to Europe prevails at the negotiating table in Brussels. It will be an important test for all those in the EU who believe that having more Europe is possible without having more Brussels.

NOTES

- 1 Jörg Asmussen, "Moving out of the crisis: Europe's joint response," Bertelsmann Foundation, Washington, DC, 10 October 2013.
- 2 Benoît Coeuré, member of the ECB executive board in a speech on exit strategy given in Geneva on 3 May 2013.

Additional Analysis on aicgs.org:

- Interview with Dr. Andreas Dombret on Europe's Economic Recovery (21 October 2013).
- Interview with Parliamentary State Secretary Steffen Kampeter on Economic Progress in Europe (14 October 2013).
- "The Age of Central Bank Experimentation," by Alexander Privitera, *AICGS Issue Brief* (2013).





LILY GARDNER FELDMAN

We need to recruit and promote a new political generation to be invested in German-American ties on the foundation of their common interests.

Both President Barack Obama and Chancellor Angela Merkel have accorded importance in their domestic policy priorities to the needs and expectations of young people. They have emphasized reducing unemployment, creating new jobs, improving education and training, and promoting careers in science and technology. They both fear the possibility of a "lost generation" and have sought to connect with young voters politically, in the U.S. presidential election of November 2012 and in the German federal election of September 2013.

This aggressive attention to a new generation, to the future, in both countries—the Millennial Generation in the U.S. and Generation Y in Germany (those between the ages of approximately 18 and 29)—is not apparent in the Obama and Merkel public visions of the future of German-American relations. They give little sense that the importance they assign to this new generation of political voters, activists, and imminent leaders in domestic politics will be important in German-American and transatlantic ties in the next decade.

Notwithstanding the public silence of Obama and Merkel, overtly translating their domestic priorities into foreign policies, there are government and private programs and initiatives connecting young people at the political and societal levels to involve and nurture "young leaders" for German-American relations, but they tend to entail disparate activities. However, these efforts could benefit from being consolidated, expanded, and prioritized. They need open, official, consistent patronage from the American president and the German chancellor, promoting new German-American institutions aimed at this new political generation.

To chart the future trajectory of the German-American and transatlantic partnerships in purpose and content, and to devise channels for a new generation's engagement and dialogue across the Atlantic, we need to know more about this new generation's ideological preferences, racial and ethnic make-up, primary policy concerns, and dominant values. This essay outlines some of the main characteristics of Generation Y and the Millennials and implications for German-American relations.

We are not likely to capture satisfactorily the essence of a generation with the single resource of survey data, but for now, and until institutions are augmented and refined to understand and cultivate German-American relations for the next generation of leaders, we do not have much else. It is, however tentative, a first attempt to amplify the need for a concentrated, mutual German-American effort.¹

Statistical Importance

There is a significant difference in the relative strengths of the Millennial Generation and Generation Y in the U.S. and Germany. There are some 80 million Millennials, representing around 25 percent of the total American population (313 million), whereas in Germany the comparable cohort stands at approximately 9.7 million, only 12 percent of the total population (80.5 million). The discrepancy will grow: by 2020, there will be 88.5 million Millennials (26% of total population), while German equivalents will have shrunk to 8.7 million (10.8% of total population).

Ideological Affiliations: Mixed

Millennials do not vote as much as the general population. In the last U.S. federal election, only 50 percent of Millennials turned out to vote, whereas the turnout in the general population was 57.5 percent of eligible voters. Because of the size of the Millennial population, even at a lower turnout rate Millennial votes were decisive.

According to the 2013 surveys of the Harvard Institute of Politics (HIOP), 55 percent of all Millennials (48% of college students) voted for Barack Obama in 2012, while 33 percent voted for Mitt Romney (38% of college students). However, party affiliation was much closer: 35 percent of college students identified themselves as Democrat, 31 percent as Republican, and 33 percent as Independent. On ideology, 37 percent of college students said they were liberal, 25 percent conservative, and 38 percent "moderate." In the entrenched gridlock of current and future American politics, young Independents and "moderates" may become increasingly important segments of the voting public.

Forty percent of Millennial respondents (but 46% of college students) said they were not supporters of the Tea Party, a powerful new force in American politics, with only 11 percent (the same for college students) indicating they were. A large segment of those Millennials surveyed, 48 percent (43% of college students), responded that they were not sure.

In the 2009 German federal elections, of 20 to 30 year-olds eligible to vote, approximately 60 percent

cast ballots (overall turnout was 70.8% of eligible voters). Before the 2013 election, some political observers reiterated previous concerns about the political disaffection (*Politikverdrossenheit*) of youth, whereas other analysts noted (as we can in the U.S.) youth's preference for political means other than traditional voting as more accurate measures of significant political engagement.

Thirty-four percent of Generation Y voted for the Christian Democratic Union (CDU)/Christian Social Union (CSU) in the 2013 German federal elections, 24 percent for the Social Democratic Party (SPD), 10 percent for the Greens, 8 percent for the Left Party, 6 percent for the Alternative for Germany (AfD), and 5 percent for the Free Democratic Party (FDP). A survey of those between 16 and 29 years of age conducted by Forschungsgruppe Wahlen in 2012 for the Konrad-Adenauer-Stiftung predicted this preference for the CDU/CSU.

The Konrad-Adenauer-Stiftung study revealed that young Germans tend to be "conservative" as measured by their high acceptance of values such as "home and hearth," "stability," and "order," although the very terms "liberal" (55% had no positive association) and "conservative" (68% had no positive association) seemed foreign to them. However, the ideological outlook appears different when the focus is on university students: in a 2011 survey by the University of Konstanz, 19 percent of respondents identified themselves as on the "left," 3 percent on the "right," and 66 percent in the "center." The key political question, as in the U.S., is how the "center" will be defined by parties and young voters. When assigning themselves ideological labels, without regard for how they voted, Generation Y reported itself decidedly to the left: 48 percent Social Democratic; 45 percent Green; 21 percent Liberal; 18 percent Christian-conservative; 3 percent National-conservative. Seven percent identified themselves as Communist.

Diversity: A Key Characteristic

The composition of American and German societies is changing. American Millennials are comprised equally of women and men and are ethnically and racially diverse. In terms of self-identification, 59.2

percent are non-Hispanic White (63.2% in the general population); 19.9 percent Hispanic (16.4% in the general population); 13.5 percent African American (12.3% in the general population); 5.1 percent Asian (4.7% in the general population); 0.7 percent Native American (same in the general population), and 1.5 percent are multi-racial (2% in the general population). More than a quarter of Millennials has a migration background, half with one or more foreign-born parents and half foreign-born themselves.

Forty-nine percent of Generation Y in Germany are women, 51 percent are men. Around 25 percent of that age cohort (2.2 million young people) identify with a migration background. The largest number of all age groups with a migration background has roots in Turkey: almost 3 million persons, 18 percent of whom are between the ages of 16 and 24 (with a further 23% under 15).

Salience of Issues for A New Political Generation: Economy, Ecology, Peace, Civil Liberties, and Privacy

Most Millennials, like most Americans, rank jobs and the economy at the very top of their list of concerns. When asked in a 2013 Harvard University Institute of Politics (HIOP) survey which issues were of most concern to them, 59 percent of college students said the economy, with 75 percent specifying that job creation and lowering unemployment were more important than other issues, whereas only 24 percent said those concerns were less important. Much further behind economic issues were education (7% of those surveyed) and health care (5% of respondents). Only 1 percent said the environment was of concern, however, and "combating the impacts of climate change" received only 31 percent of "more important" responses, whereas "less important" answers stood at 68 percent.

Only 3 percent of those polled cited foreign affairs as a concern. Asked about "maintaining the most powerful military force in the world," only 35 percent thought it was more important than other issues, whereas 53 percent thought it was less important. In response to the question of whether the U.S should

assume leadership in international crises, only 28 percent answered in the affirmative, with 69 percent believing that other actors should take the lead. In a Pew poll two years earlier, in cases when allies disagree, two-thirds of Millennials thought cooperation and compromise with allies essential, whereas 29 percent felt the U.S. should insist on national interest. Two-thirds supported diplomacy over military strength, which received only a quarter of positive answers.

Reflecting perhaps the relative stability of the German economy, a 2012 survey conducted by Hamburg University and Humboldt University in Berlin, suggested that young Germans found issues of individual economic well-being of some importance (around 46%), but only in the middle of their rankings. To these German students, ecological sustainability was more important (at 51%). On other domestic issues, in the 2011 Konstanz study, a large majority (47% "somewhat" and 28% "completely") agreed with the political goal of promoting technological development, and high numbers (38% "somewhat," 26% "completely") agreed that priority should be given to the environment before economic growth.

An overwhelming percentage of Generation Y, 71 percent, ranked peace as "very important" (with a further 20% seeing it as "rather important"). Only 3 percent thought national strength and self-assertion to be "very important" (an additional 11% declared it "rather important"). These results are consistent with the Federal Republic's postwar foreign policy of learning from history and exercising "tamed," "civilian," and "soft" power."

Both Americans and Germans in the targeted age group appear more socially liberal and tolerant than their elders on at least two controversial issues. Forty-three percent of Millennials believe there should be government recognition of same-sex marriage. Twenty-six percent disagree. Forty-four percent support a path to citizenship for immigrants, and another 22% support legal status for immigrants living in the U.S. in violation of U.S. immigration law. In Germany, Generation Y agrees overwhelmingly with the general goal of tolerance and lack of prejudice (55% say it is "very important," and another 35% "rather important"). Significantly more opposed poli-

cies limiting immigration to Germany (51%) than supported such policies (26%).

Some analysts are beginning to suggest that Millennials in the U.S. and Generation Y in Germany may be defined ultimately by events more than age. The uproar in Germany over monitoring by the U.S. National Security Agency (NSA) may be indicative, with younger adults emerging in both countries as the "privacy and civil liberties generation."

NSA monitoring has been a source of major friction between the U.S. and German governments, but young people in the two countries appear to be in agreement about it. In the Pew 2011 survey, only 25 percent of Millennials thought it necessary to surrender some civil liberties to fight terrorism; 72 percent said it should not be necessary. In the HIOP 2013 Millennial survey, the same number—25 percent—would surrender some freedoms and privacy for national security reasons; the remainder was split between those who disagreed and those who neither agreed nor disagreed (37% each). A TIME poll after the Edward Snowden revelations indicated that only 19 percent of Millennials thought his actions were bad.

Civil and individual liberties were of high salience (65%) in the Hamburg/Humboldt poll, and "freedom" in general ranked even higher in the Konstanz study, where 64 percent identified it as "very important" and 30 percent deemed it "rather important." Even before the Snowden revelations, in a 2011 Allensbach poll, 60 percent of 16 to 29 year-olds surveyed approved of Wikileaks' publication of secret documents, with only 27 percent believing the documents should have been kept secret.

Channels for Civic and Political Engagement: Both Online and Offline

Millennials in both the U.S. and Germany are disillusioned with their elected officials. In the U.S., 48 percent of respondents agreed their votes had no effect, with only 8 percent believing their votes mattered (44% neither agreed nor disagreed). A majority of 56 percent believed elected officials do not share their priorities, whereas only 10 percent felt a connection with elected officials (34% neither

agreed nor disagreed). Nonetheless, in the U.S., 71 percent of Millennials are registered to vote (voter registration is automatic in Germany). In Germany, 35 percent felt that the average citizen had virtually no influence on political decisions, with another 35 percent sharing that view "somewhat."

While apparently alienated from traditional politics, young adults in both countries comprise a "connected" generation. In the U.S., 83 percent have Facebook accounts and 33 percent use Twitter. In Germany, 77 percent of Generation Y use social media through the internet.

A disproportion of Millennials are not voting and are dissatisfied with their elected officials, but Millennials nevertheless do use social media for political purposes. In a 2012 Pew study, for eight different categories of political activity on the internet (from "liking" to following, belonging to groups to encouraging others), participation among social media users ranged from 44 percent to 25 percent, higher than all other age cohorts in seven of the eight activities. The portion of Millennials politically engaged is using social media for politics.

An Allensbach survey in 2011 found that 78 percent of 16 to 29 year-olds in Germany characterized as "good" the opportunity to be involved in online activity concerning political issues. For a range of nine online political activities (from signing petitions to answering political surveys; offering political commentary to joining political chat groups; blogging to sending a message to an elected official), answers ranged from 39 percent to 6 percent, higher in all categories but one than responses in the 45 to 59 age cohort.

Offline political commitment, despite disillusionment with elected officials and disaffection from voting, is also substantial. Thirty-seven percent of American 18 to 24 year-olds declared themselves as having participated in at least one of four activities: petition-signing; contacting a government official; calling a media outlet; or sending a letter to the editor of a newspaper. Nevertheless, this figure is lower than for all but one other age category. In seven named offline efforts in Germany (citizens' initiatives, Bürgerinitiativen; demonstrations; letter-writing; signature campaigns; political party activity; member-

ship in a political action organization; communication with a politician), answers ranged from 54 percent to 4 percent in the 16 to 29 year-old category, lower in all but two items than the responses in the 45 to 59 age cohort. Whereas engagement of Generation Y appears greater than the counterpart Millennials across the Atlantic, in relation to their own society Generation Y is no more engaged offline than the Millennials.

It is still too early to tell to what extent online political activity influences political decision-making and generates new political leaders, but some concrete examples among Millennials—creating civic communities that harness technology for more effective governance and public engagement—do exist, notably Code for America and Mobilize.org. In Germany, the Pirate Party (die Piraten) emerged as a party of the young focused on technology as a channel for politics, but its internecine battles, narrow policy focus, and weak showing in the 2013 federal election suggest aggravated growing pains.

Germany and the United States, federal systems, will both have to address certain issues, particularly aspects of the economy, ecology, the environment, and climate change, at the state and *Land* levels. German and American societies, however, do not choose leaders at these levels from the ranks of the generation that apparently cares most about these policy challenges.

Even were we to extend the "young" label to 45 years of age, only two U.S. governors are younger than 45 (Nikki Haley of North Carolina and Bobby Jindal of Louisiana), and only two currently-serving governors were younger than 45 when they entered office (Martin O'Malley of Maryland and Scott Walker of Wisconsin). In Germany, not one Minister-President is 45 or younger. The situation appears more promising (but not very much) at the city level, where 12 percent of Lord Mayors in Germany are age 45 or younger, and in cities with a population of 250,000 or higher, 16.5 percent of American mayors are under 45.

How to Engage a New Political Generation in German-American Relations

The German-American partnership will remain essential in the next decade. We have moved beyond the uni-polar American "rebalancing" to Asia of the first Obama administration and the joint European-American "pivot" promise of the second Obama administration. We now are experiencing a renewed recognition that we—Americans and Germans and, more broadly, Americans and Europeans-share common values and pragmatic interests. Rhetoric aside, the EU is still the biggest trade partner for the U.S.; the EU and the U.S still represent 50 percent of the world's GDP; mutual foreign direct investment amounts to some \$3 trillion. The tenor and character of negotiations over the Transatlantic Trade and Investment Partnership (TTIP) suggest the importance both sides attach to bilateral economic ties for growth at home.

Whatever may happen to these negotiations, transatlantic economic relations will remain primary for German and American leaders and significant for young adults on both sides who understand that stronger economic ties will mean more jobs and will both demand and enable better education. They are a policy arena where young Germans and Americans can be invested in the relationship, even though they weigh the centrality of economic concerns somewhat differently. Mutual exchanges about domestic and international economic developments and choices will engage the political attention of the young and their policy involvement. Even though ecological questions per se are much more important to young Germans than to young Americans, the latter will be drawn into the issues by the inextricable links among economy, technology, and the environment.

Early in his first administration, President Obama extolled a linkage connecting sensitivity to climate change and environmental degradation, on the one hand, to green technologies, more advanced education, research and development, and more and better jobs, on the other. He may have expected Millennials in his constituency to embrace the linkage and assign comparable value to each piece on the chain. Instead, Millennials assign greater priority to the more purely economic issues, particularly jobs. It would seem

Obama would be better served by a German Generation Y, which places greater priority on green technology and its most closely-related parts. Were Obama to promote institutional development and strengthened ties between young Germans and young Americans, he might achieve a greater understanding among his own constituents for the linkages he has been trying to make. Promotion of bilateral relations among young adults may serve his agenda admirably.

Hyphenated Americans and hyphenated Germans likely will be an increasingly significant element of a new political generation, connected by shared social values of tolerance; common political views on controversial issues such as immigration; and extensive experience of integration into their respective societies. Leaders, a source of disappointment to their constituents, would do well to see the opportunity for their agendas in the cross-fertilization of these societies.

Young Americans appear to be more "German" when it comes to downplaying military strength and national self-assertion and leadership. Young people in both countries value diplomacy over military intervention and international cooperation over unilateralism. Notwithstanding some political alienation, they appear prepared to push for more open foreign policies in which the promotion of human rights is integral just as, in their view, civil liberties are paramount at home.

Communication can no longer be contained, so it should be embraced and promoted. Blogs, fora, Facebook, and the rest of digital life are promising tools through which Germans and Americans can develop and sustain virtual communities. They need only encouragement and resources, and leaders they can count on.

Institutional Options: 2015

Speaking to students at Freiburg University in February 2013, Harald Leibrecht, the German Foreign Office's Coordinator for Transatlantic Cooperation, noted that we cannot simply manufacture the sentimental ties that developed between past generations based on shared experiences of war, the Cold War, and a seven-decades process of "recon-

ciliation" (*Versöhnung*). He warned against complacency and bemoaned the absence of an emotional connection in German-American relations. For this new generation an institutional and personal answer might lie in the other examples of Germany's postwar foreign policy of reconciliation.

Of all the cases of developing friendships with former enemies, German-American reconciliation was the quickest, the least contentious, the most automatic and, therefore, the one now taken most for granted. As part of the vicissitudes of Germany's other "special relationships"-with France, Israel, Poland, and the Czech Republic-the two sides periodically have reevaluated and recalibrated relations with an eye to the future and the nurturing of a new generation committed to the partnerships. Institutional expressions have included the Franco-German youth parliament; the German-Polish Forum; the German-Czech Future Fund and Discussion Forum: and the German-Israeli Future Forum Foundation. The latter two involve joint projects by young adults on pressing societal and policy issues, an "opportunity for creative teamwork" for participants with differing backgrounds. The on-the-ground discussion for aincreasingly have focused on young leaders and have melded the worlds of politics, economics, and civil society. Joint Franco-German and German-Polish websites are further devices to connect young people.

These forward-looking initiatives have been born on special anniversaries or defining moments in the bilateral relationships: the fortieth anniversary of the Franco-German Elysée Treaty in 2003; the 1970 German-Polish Normalization and 1991 German-Polish Good-Neighborliness Treaties; the German-Czech Declaration in 1997; the fortieth anniversary of German-Israeli diplomatic relations in 2005. They have been tended carefully as joint activities by foreign ministers and presidents.

The seventieth anniversary of the end of World War II and of the beginning of a profound German-American friendship could provide in 2015 a similar opportunity for a major, highly visible institutional initiative directed toward the joint concerns and potential of young people in Germany and the U.S. Success likely would require the active sponsorship of the American president and the German chan-

cellor. Both might see the compatibility of such an initiative with their own domestic political objectives and the fulfillment of their respect agendas. Domestic priorities and foreign relations would intersect.

The United States and Germany have built their relationship over the last seventy years on a careful and complex combination of sentiment and pragmatism. The future depends on the recruitment of a new generation committed not only to the relationship itself, but to the mutual priorities it often reveals. We need to recruit and promote a new political generation to be invested in German-American ties on the foundation of their common interests. The seventieth anniversary of the end of World War II ought to be the occasion. Immediate needs ought to provide the incentives. Mutual understanding ought to supply both the means and the motivation.

NOTES

1 Data for this essay were taken from the following American sources: the U.S. Census Bureau; Harvard University Institute of Politics, "Survey of Young Americans' Attitudes towards Politics and Public Service," March-April 2013, and (with others) "Millennials Civic Health Index," February 2013; The Pew Research Center, "The Generation Gap and the 2012 Election," November 2011, and "Social Media and Political Engagement," October 2012, and "Civic Engagement in the Digital Age," April 2013.

The following German sources were consulted: the Statistisches Bundesamt; the Institut für Demoskopie Allensbach, "Social Media, IT & Society," June 2011, and "Immer mehr Mitglieder von Facebook & Co.," October 2012; Forschungsgruppe Wahlen statistics for ZDF, September 2013; "Wo bitte geht's zum Generationenkonflikt?" Konrad-Adenauer-Stiftung, 2013; "Gesellschaftliche Werte und politische Orientierungen der Studierenden," Universität Konstanz, 2010; "Zwischen Ernst und Unterhaltung," Helmut Schmidt Universität Hamburg, 2012 "Was die Deutschen bewegt," Universität Hamburg-Humboldt Universität, 2012.

Unfortunately, age groups and questions rarely match up perfectly in the American and German surveys, which gives more cause to assign distinct nomenclature, recognizing that they are not an identical cohort.

Additional Analysis on aicgs.org:

- "Once Upon a Time, It Was a Man's World: Women in Conservative Parties in Germany and the U.S.," by Isabelle Kürschner, *AICGS Transatlantic Perspectives* (2013).
- "The Franco-German Elysée Treaty at Fifty: A Model for Others?" by Lily Gardner Feldman (24 January 2013).

INNOVATING TO STRENGTHEN YOUTH EMPLOYMENT

STANLEY LITOW

We must improve the quality of education and equip high school graduates with the skills they need to obtain the credentials required to participate in the twenty-first century economy.



The financial crisis of 2008 exposed serious weaknesses in the world's economic infrastructure. As a former aide to a mayor of New York and as deputy chancellor of the New York City Public Schools (the largest public school system in the United States), my chief concern—and a significant concern to IBM and other companies interested in global economic stability-has been the impact of global economic forces on youth employment. Across the United States and around the world, youth unemployment is a staggering problem, and one that is difficult to gauge with precision. One factor that makes it difficult to judge accurately is that many members of the youth population have yet to enter the workforce, making it hard to count those who are unable to get jobs. What we do know is that the scope of the problem is overwhelming. Youth unemployment in countries such as Greece and Spain is estimated at over 50 percent, while in the United States the rate may be 20 percent, 30 percent, or higher in some cities and states. Why is this problem so daunting? Why does it persist? And, most important, how can communities, educators, and employers work together to address it?

The Roots of Youth Unemployment

While we can take some solace in the fact that U.S. high school graduation rates are higher than they

were 10 or 20 years ago, this good news is tempered by the reality that the high school diploma alone is no longer adequate preparation for a middle-class career. Young people who enter the workforce with only a high school diploma are expected to earn no more than \$15 per hour, and many will earn less. The foundation of the problem is that America's school systems-largely controlled by states and local school districts-have not evolved their education models sufficiently to keep pace with the new demands of the global, knowledge-based economy. There is no "silver bullet" in the effort to improve education. Investments in early childhood education, expansions and restructurings of the school day, and efforts to improve teacher quality all have been important. But some specific, focused, and targeted efforts directed at high schools are long overdue.

As local, national, and global economies have changed, fewer "living wage" jobs have been created or sustained for those who have only high school diplomas. Today's reality is that young people need postsecondary education (either a two-year or a four-year degree) and the requisite skills to be prepared for the jobs of the twenty-first century. The high school diploma is now the first step toward career readiness—not the last.

We also must focus on the relevance and rigor of America's high school programs. The acid test for the quality of our high school programs is the postsecondary success rate of their graduates, and the statistics are not encouraging. Currently, only 25 percent of young people who possess a high school diploma and register for community college will successfully complete their "two-year" degrees within six years. That means that 75 percent of community college registrants leave without their degrees and enter the competitive global workforce with neither the credentials nor the skills to earn a living wage. In some locales, the failure rate is even greater, as community college graduation rates hover in the single digits. And so the question becomes, why do so many American young people with high school diplomas fail to complete a two-year postsecondary degree?

An examination of one community college freshman class using IBM data analytics yielded some intriguing insights. Chief among them was that nearly 100 percent of community college freshmen who required two remedial courses—with one of them being math—failed to complete even one postsecondary semester. More than 50 percent of these students dropped out of community college within two months of matriculation. This drives home the point that unless a high school program is academically rigorous—in addition to being economically relevant—it is inadequate preparation for either the demands of postsecondary education or the training required to participate in the twenty-first century economy.

Where the Jobs Are

According to the U.S. Department of Labor, there currently are 29 million "middle-skill" jobs (jobs requiring more than a high school diploma but less than a four-year degree) in this country. The Labor Department expects the economy to create 14 million additional middle-skill jobs over the next ten years. These reasonably high-paying middle-class jobs will require specific skills and postsecondary credentials. Young people who are able to attain the relevant credentials and skills—and who, in some cases, will go on to get four-year degrees and more—will benefit from an expanding economy in which their services will be in high demand. But those without the requi-

site training will be left behind in an uncertain world with limited and diminishing prospects.

Let's compare the numbers. As noted earlier, wages for high school-only graduates typically will max out at \$15 per hour—often for less than full-time work without overtime, vacation pay, retirement savings, or medical coverage. By contrast, those with postsecondary training in critical areas can expect to occupy middle-skill jobs with starting full-time salaries approximating \$40,000 per year and more. Studies show that disciplinary focus can be more important to earnings than the number of years of training. For cities and states struggling with budgetary cutbacks, diminishing tax revenues, and fraying social safety nets, the benefits (calculated in improved tax revenues) of improving high school completion rates, along with the rigor and relevance of those programs, are immediately clear.

Rigorous and relevant high school programs will result in a growing, wage-earning, tax-paying middle class that will return rich dividends on state and city investments in education. Meanwhile, locales that focus on quantity over quality when it comes to graduating young people from high school with the ability to attain postsecondary skills will remain mired in a world of dwindling opportunity—unable either to attract or retain employers, or maintain their tax base.

Innovation in Education

We must improve the quality of education and equip high school graduates with the skills they need to obtain the credentials required to participate in the twenty-first century economy. Taking steps to evolve and improve education is nothing new. In fact, educational investments and structural changes to meet the needs of changing economies have been made before in U.S. history.

As this country became more urban, the nature of work shifted from farm to factory. With this shift, the basic skills provided of an eighth-grade education (the minimum American educational standard prior to World War II) were no longer enough for a growing and increasingly industrialized nation. After World War II, the United States emerged as a global industrial power and updated its educational standards to

keep pace with a new world economy by making high school mandatory. Upgrading the minimum national educational requirement from 8th grade to 12th grade was a game-changing innovation that resulted in more than fifty years of economic growth and middle-class prosperity. Just as influential was the creation of the Servicemen's Readjustment Act of 1944 (the Gl Bill), which expanded higher education opportunity to veterans and resulted in a significant increase in the number of Americans with a postsecondary education.

Now, in the second decade of the twenty-first century, we stand at a similar crossroads with a similar set of requirements and opportunities. It is time for the United States to revise the traditional 9-12 high school model upward into a new and more rigorous, relevant, and integrated approach that includes grades 9 through 14. This will give every graduate both a high school diploma and the two-year postsecondary training they will need to compete successfully for middle-skill employment in a twentyfirst century job market that will continue to grow over the next decade. Such an innovation in education is as significant as developing a new product that revolutionizes the marketplace. The grades 9 through 14 model is an innovation that reengineers education at its core as it ushers in a new era in which educators and employers work together to connect training directly to jobs.

Pathways to Prosperity

As part of developing an innovative approach to integrating secondary and postsecondary education with workplace learning to connect training more directly to employment, IBM focused attention on the data that provide growing evidence of a skills gap in the American economy. In our monograph entitled STEM Pathways to College and Careers Schools: A Development Guide, we note that many young adults (including those with only high school diplomas, and those who have completed some college) lack the academic knowledge and workplace skills to succeed in the twenty-first century economy. As completion rates for four-year colleges improve, undereducated young people are subjected to downward market pressures as they are replaced by college graduates (or those who have completed some college) and

pushed out of the middle class.

Mobility Makers, the 2011 study by the Center for an Urban Future, indicates that, even though young people understand the need to acquire skills and education to qualify for jobs in today's global economy, a stunningly high percentage of them still fail to finish their college degree. The two most significant factors driving down college completion rates are inadequate academic preparation and lack of guidance and support.

These low graduation rates come with substantial financial implications for students and taxpayers alike. For example, the study indicates that each community college dropout costs New York City more than \$17,000 in federal, state, and city aid and funding. Furthermore, those without college degrees typically earn 85 percent less than their college-educated peers over a lifetime. The study concludes that a mere 10 percent increase in community college graduation rates in New York City would increase earnings for that graduating class by \$631 million in the first year alone, and by \$3.4 billion over a thirty year career—with profound implications for the city's tax base.

Meanwhile, the 2011 Pathways to Prosperity report by researchers at the Harvard Graduate School of Education advances the thesis that American schools have been too restrictive in their homogeneous approach to preparing all graduates to attend fouryear colleges. The authors write that "preparing for college and preparing for a career should not be mutually exclusive options." This is because 60 percent of Americans do not earn a four-year degree by their middle twenties, and more than 70 percent of two-year college students in large cities fail to earn their degrees even after three years. With half of new middle-skill jobs over the next ten years expected to require a two-year college degree, America's low degree-completion rates represent a huge missed opportunity to reduce youth unemployment.

To help bridge the gap between where we are and where we need to be, IBM partnered with the New York City Department of Education, the City University of New York, and the New York City College of Technology on the Pathways in Technology Early College High School (P-TECH). New York City plans

to expand the P-TECH model over the next several years. The model has already been replicated in Chicago and is spreading throughout New York State under the leadership of Governor Andrew Cuomo, who has announced plans to create new P-TECH schools in each of the state's ten economic development districts.

This innovative approach to connecting education to jobs is a three-way collaboration among a school system, a community college, and a corporate partner. Workplace skills such as knowledge acquisition, teaming, problem-solving, and verbal and writing skills are embedded in the curriculum. Courses use project-based learning to enable students to work in teams, solve problems, create business plans, and learn presentation skills. Structured workplace visits to a P-TECH model school's corporate partner are part of the academic program. In addition, every student has a mentor from his or her school's corporate partner and has the chance to visit a workplace, learn through an internship, and take regular college courses (not high school advanced placement courses) as early as the 10th grade.

This is not to say that we don't incorporate innovative uses of technology into the P-TECH model. First of all, to enhance the value of the mentor/protégé relationship, we developed the MentorPlace website to make mentor activities more substantive and more connected to academic standards and learning goals. We also created a site called Teachers TryScience, which provides educators with access to the best science lesson plans, videos of board-certified teachers teaching them, and collaborative tools to allow teachers to assist each other in incorporating science into the classroom in exciting ways. Finally, to assist students who have lower reading skills, IBM researchers used voice-recognition technology (pioneered by IBM Research) to develop a learning tool that helps address reading deficiencies. These tools are available to P-TECH-model schools, to other schools that work with IBM, and to NGOs engaged in literacy education. That said, the key to the P-TECH strategy is not a piece of technology or a software tool. Rather, the true innovation of the P-TECH model is the integrated six-year program that creates a clear pathway from school to career via curriculum restructuring and the addition of two years of instruction.

The results have been impressive. In these public, non-charter, open-admissions schools serving culturally and economically diverse populations, academic achievement and attendance have been exceptionally high. If this model were broadly replicated under existing Carl D. Perkins Vocational and Technical Education Act funding, hundreds of thousands of young people could benefit from the increased opportunities to participate more fully in a growing middle-class economy. The results for these young adults, their families, and their communities would include shrinking unemployment levels, along with a growing and stable tax base.

The prospects for a long-term and sustainable "return on investment" in our young peoples' education have never been more promising. In his February 2013 State of the Union Address, President Obama stated that every student should be given the P-TECH opportunity: to be motivated, to learn, and to apply their skills in a meaningful and rewarding career. In response, the U.S. Department of Education and other key federal government entities are developing plans to build on P-TECH's success, and to offer the program to many more students.

Where We Should Start

More than \$1 billion in funding for innovation in American education already exists under the Perkins Act, but our funds-deployment protocol—which largely follows population-based formulas, with few demands for metrics or accountability—needs to be restructured to incorporate three critical components:

- There must be a clear requirement that career and technical education (CTE) is connected to labor market data so that graduates are prepared for present and future jobs.
- CTE programs must be structured as public-private partnerships between educators and employers to ensure that curricula are both academically rigorous and economically relevant.
- Community colleges and four-year institutions must be included in the design and implementation of CTE

programs as part of a concerted effort to prepare young people for careers. In addition to restructuring their curricula, postsecondary institutions must help reshape work opportunity programs such as Federal Work Study so that students can gain relevant work-place experience (versus cafeteria or library jobs unrelated to career preparation) during their academic training—essentially offering an American version of the successful European apprenticeship model.

Together, the Carl D. Perkins and Federal Work Study programs provide more than \$2 billion in support to states, districts, and schools for education and training. We need to be much smarter about how we allocate these resources to states and localities, and we must insist on accountability for performance. Repurposing existing funding to support broad replication of the P-TECH model could go a long way toward reducing youth unemployment; reenergizing communities with new hopes, new growth, and new tax revenues; and reinforcing America's ability to compete on the global economic stage. By adopting true innovation that affects both how and what we teach-and ensuring that our young people receive education that is both academically rigorous and relevant to the demands of the global marketplace-we can close the "skills gap" in our economy, overcome the challenges of youth unemployment, and reap the economic benefits for decades to come.

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TECHNICAL SKILLS EDUCATION: VOLKSWAGEN CHATTANOOGA IMPLEMENTS CREATIVE SOLUTIONS TO FILL SKILLS GAP

SEBASTIAN PATTA



To end the longstanding and growing skills discrepancy, all stakeholders should act together as part of a renewed local/regional skills and competence governance, led by consortiums of business and education partners, so that education really leads to improved skills deployment and employment.

The U.S. labor market continues to experience a paradox. While unemployment remains hovering around 8 percent (12 percent for our millennial generation), companies throughout the nation are unable to find enough machinists, robotic specialists, maintenance technicians, and other highly skilled workers to maintain their factory floors.

Volkswagen Chattanooga officially opened the doors to its manufacturing facility in Chattanooga, Tennessee in the summer of 2011. The company was recruited to Tennessee based in part on the extraordinary combination of location, community, and government support as well as access to a promising workforce. While both the leaders and citizens continue to support our operation, we face the same challenge of locating and recruiting a qualified workforce as most organizations that use advanced automation technologies in the manufacturing process.

The purpose of this paper is to provide an overview of Volkswagen Chattanooga's implementation strategy and countermeasures to this dilemma in terms of both short and mid-term actions. It further discusses the need for additional action from all stakeholders and the necessity of continued educational reform to continue leveraging the existing momentum currently taking place.

Launch of the All New Passat

With the realization that Volkswagen would be staffing an entire plant of greater than 2,500 manufacturing workers that possessed little or no manufacturing experience, a comprehensive selection and training program would need to be established. In agreement and cooperation with the State of Tennessee and City of Chattanooga, Volkswagen constructed a 163,000 SqF (15,300 SqM) training facility known as the Volkswagen Academy in 2009. Five separate training centers (Apprentice, Automation, Automotive, Lean, and Conference) make up the core of the facility that are linked via a series of classrooms and distance learning labs.

While recruiting nation-wide for skilled positions, systems and processes were established to select, from the more than 80,000 applicants, new employees that displayed the required aptitudes and personality characteristics that would provide them and Volkswagen with the best chance for success. Selection was based upon a series of practical examinations that were reliable and valid indicators of expected successful performance (i.e., following standardized work practices, vigilance, dexterity, etc.). This exhaustive assessment phase required six to eight hours of hands-on and paper and pencil testing. While selected employees were rightfully proud of

their accomplishment, Volkswagen was confident that selected employees could learn the job quickly and deliver products with the highest quality demanded when introducing a new vehicle to the market.

The onboarding process varied depending upon the position. For assembly workers, all were required to participate in a four to six week "Common Core" program that included not only the popular HR mainstays but also a detailed introduction to the Volkswagen Production System, Fundamental Skills development, and stamina/strength conditioning. For skilled (i.e., industrial maintenance, technicians) workers, in addition to the above, a more detailed technical training program was developed to emphasize a mechatronic skill set. This comprehensive training program of twenty-one weeks was implemented in part due to the fact that the selected workers did not possess the requisite knowledge, skills, and abilities to operate, program, and repair the production equipment being installed in the factory (common to Volkswagen's European factories). The intensive pre-production training curriculum provided Skilled employees with the basic skills and qualification to operate and make basic repairs to the equipment. Moreover, the onboarding program introduced advanced production systems processes such as Total Productive Maintenance (TPM), Lean Manufacturing, and Industrial Engineering principles. Intermediate and advanced technical training would have to wait until later to enable skills building over a longer period of time.

While delivering more than 1.5 million contact hours of instruction during the launch phase of the project, metrics developed to measure the effectiveness of the training programs indicated positive effects in terms of Quality, Productivity, Delivery, and Safety.

However, while effective for the launch, the expense of this training program was unsustainable (>\$10 million). Other more cost efficient systems had to be developed that could sustain the organization for the long term by ensuring that a talent pipeline of skilled workers was filled just in the time that they were required. One key countermeasure for this problem was the introduction of Volkswagen Chattanooga's apprentice programs.

Apprenticeship

Held completely within the Volkswagen Academy and within the manufacturing plant, the Volkswagen Automation Mechatronic Apprenticeship Program (AMP) was established mid product launch in the autumn of 2010 in partnership with the local Tennessee College of Applied Technology (formally Tennessee Technology Center). The State established twenty-seven Colleges of Applied Technology governed by the Tennessee Board of Regents in 1983. While rare in the industry to initiate such a program during the challenges that are inevitably faced in a new product launch, it was our first priority due to the inability to locate skilled talent within the region.

The Tennessee College of Applied Technology's mission to provide business and industry with the technical skills and professional training for today and future workforce requirements was an excellent fit and good partner for Volkswagen's practically based technical skills development program. The schools leadership team worked diligently to meet Volkswagen's curriculum requirements and ultimately gained approval for the customized program through the Tennessee Board of Regents. Since the original startup, the program has been further enriched with the local Community College by articulating academic credits to their AAS in Engineering Systems Technology degree program. With slight curriculum adjustments, all participants in the program are now graduating with an Associate's degree, further enabling them to continue their academic education in the future.

The AMP continues to foster the fundamental belief that skilled Team Members should possess a wide array of capabilities in mechanical, electrical, computer, and production management fields. In other words, a true multi-skilled technician is developed that can support all areas of the manufacturing facility. The cornerstone of the program is the singular focus upon hands-on or practical training and development of individuals through off-the-job qualification and training as well as on-the job competence development.

When fully implemented, the three year program consists of 72 apprentices and includes a series of rotations from the Volkswagen Academy where delivery of training modules and qualification assessment take place to the manufacturing plant where work assignments and strengthening of skills taught in the Academy can be crystallized. We term this... "From qualification to competence." Similar in many ways to the traditional German dual education module, this program takes advantage of the strong commitment to performance related or competency instruction aligned with real-world practical application. Each segment of the program consists of four month training modules and is aligned with the Community College academic calendar.

In building upon the success of this program, a new program has been introduced in the past year. Entitled Car Mechatronic Program (CMP), this program follows a similar structure but is focused primarily on automotive diagnostics and repair. This program will accept a total of thirty-six apprentices to bring the entire population of Volkswagen apprentices to 108.

Volkswagen Chattanooga has made a commitment to the participants by offering them a world-class education, a full scholarship of tuition and fees, all required safety gear and uniforms, and a guaranteed job in the Volkswagen group upon successful completion and graduation.

In the spring of 2013, Volkswagen Chattanooga has applied for German apprenticeship equivalency certification through the AHK & DIHK organizations. We are proud to announce that through a vigorous evaluation of curriculum specifics and testing of our most recent graduating class, we have been accredited. First in the United States to garner this certification, it further establishes these programs as a benchmark and enables graduates to move throughout Volkswagen's global operations with the knowledge that our graduates possess knowledge, skills, and abilities at least to the level of our German colleagues. In fact, two individuals from our most recent graduating class are preparing now for a one year assignment in Germany at a sister factory.

Future

Volkswagen's educational initiatives aim to increase the opportunities available to our millennial and future generations. Unemployment rates for this population that are currently approaching 12 percent are one of the most pressing problems facing the United States and are correlated in no small way to the sputtering economic recovery. In risking the loss of a generation to educational acquiescence, long-term scarring effects for the United States and the innovative potential and competitiveness are likely to materialize if no actions are taken.

In moving forward, Volkswagen Chattanooga's Training Academy and its development programs are well positioned to support short and mid-term business and economic growth in the region. However, for long-term and sustainable growth for both Volkswagen and the manufacturing sector in general, even better and more relevant training systems will be required. There is a significant challenge to set the stage for a steady transformation in secondary/postsecondary/government/industry relationship and interaction. Traditional models of industry support where business partners serve on university/college advisory committees or other consultative roles will not go far enough to ensure that real competence is developed. Volkswagen's initiative to promote a return to practically based instruction through the dual education model is a beginning.

In Chattanooga, we have a good start on a real paradigm shift in the roles of business, education, and government when preparing skilled workers for the future. Colleges and universities have left their campus and traditional models of industry support and have begun a meaningful engagement. Government has shown leadership by providing resources that support the development of a training infrastructure that enable new models to be pursued, and Volkswagen has partnered in providing the leadership, additional resources, and guidance on the requirements to be competent skilled worker in the twenty-first century. The results suggest that we are on track for meaningful and fundamental change in how we view and develop skilled workers for intermediate and advanced technical occupations.

However, Volkswagen and its educational and government partners do not possess the magic bullet. It is imperative that additional action be taken to ensure that investments in education deliver the skills needed. The quality of K-12 education should be ensured by state and local governments and the right infrastructure should be put in place to encourage businesses and workers to invest in continuing education. Sustainable education reform will now need to be comprehensive (teacher/student evaluations, tenure versus pay for performance, etc.). To end the longstanding and growing skills discrepancy, all stakeholders should act together as part of a renewed local/regional skills and competence governance, led by consortiums of business and education partners, so that education really leads to improved skills deployment and employment.

Effective reform should also include changes in the United States cultural mindset toward education. Parents need to assume greater responsibility for their children's education by getting more involved, holding their children accountable for results, approaching problems at school proactively and letting go of the belief that the university path is the only educational vector.

Government also must renew their commitment and ensure financial support is available. Spending .001 percent of GDP on workforce development is not comparable to countries that view education as their top priority. In return for this investment, the development of its citizens will result in facilitating sustained economic development.

Volkswagen is committed to invest in education and therefore in the future of our operations in the United States (and abroad). We understand that an investment in education is also an investment in the success of our future workers. For the United States to compete globally for the advanced manufacturing jobs in the future, the time is now to set aside political posturing, academic elitism, and business indifference in forging a new education model that provides our future generations with the required technical qualification/hands-on experience.

Additional Analysis on aicgs.org:

- "The New Role of Universities in the Twenty-first Century: Universities as Engines of Innovation and Entrepreneurial Hubs," by Andreas Pinkwart, AICGS Policy Report 50 (2012).
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CYBER SECURITY IN THE NEW COMPUTING AGE

STEPHEN PETTIGREW



By 2020, 60% of enterprise information security budgets will be allocated for rapid detection and response approaches, up from less than 10% in 2013.

Gartner

Cyber security has become a top priority for virtually every business around the world. Anyone with valuable information is at risk. It has moved beyond just being a concern for Chief Security Officers; it is now a priority for most Chief Executive Officers. Very few weeks go by without a headline in the newspapers about a new security incident.

Cyber security has also become intertwined with national security interests, raising concerns around the world about privacy and the role of government. The exposure of top-secret NSA surveillance programs by Edward Snowden has fueled debate on this topic. It has also exposed a clear gap between Europe and the United States on data privacy issues.

So why is all of this happening? What has changed over the past few years that is making cyber security such a priority today? And what are the implications of these changes for German-American relations?

What Is Making Cyber Security Such a Priority Today?

INCREASING OPENNESS AND ADOPTION OF TECHNOLOGY

As enterprises around the world operate increasingly distributed, global businesses and adopt new tech-

nologies such as cloud competing and mobile devices to enhance their productivity and competitiveness, they become increasingly vulnerable to security threats. The openness and agility that is critical for businesses increases the "attack surface" for the bad guys to target—making it easier for them to penetrate corporate networks and access confidential information.

Despite the risk, technology has become a critical enabler of most global businesses. Security teams can no longer lock down IT environments or prevent business users from adopting new technologies. Ultimately, enterprises need to strike a delicate balance between business priorities and security requirements.

BAD GUYS ARE SOPHISTICATED AND DETERMINED

The new reality is that the bad guys have become so well funded, so organized, and so sophisticated that they have the edge in the cyber security war. These organizations have the resources to specifically target individual enterprises and identify and exploit vulnerabilities at those targets. To circumvent traditional security solutions, which were generally designed to protect against threats that had been seen before, today's sophisticated attacks are increasingly

targeted and in some cases, exploit unknown or "zero-day" vulnerabilities.

Attackers are also using information that is readily available on social networks to target groups of users with email-based "phishing" attacks or gain access to credentials. In one of the largest phishing scams this past year, three men obtained over 70 million email addresses from unsuspecting bank customers in the United Kingdom, United States, Russia, China, Australia, and Canada. The group might have netted more than \$94 million from illegally obtained financial data had they not been arrested. The prevailing view in the security industry is that traditional security solutions such as antivirus and firewalls are no longer able to protect against such advanced, targeted attacks.

"Advanced targeted attacks make prevention-centric strategies obsolete." – Gartner

Who Are the "Bad Guys"?

There are a number of different types of attackers that are driving today's cyber security environment, which makes it even more challenging to protect against them. Attackers can generally be categorized into three groups:

- Criminal organizations: Criminal organizations have realized they can profit from cyber crime and are increasingly involved in attacks targeting valuable information such as personal information and intellectual property. Why would you rob a bank when you can simply hack into a corporate network and steal valuable information?
- "Hactivist" collectives: Hactivism by groups such as Anonymous is a digital form of activism through which hackers use cyber attacks to advance social and political agendas. Edward Snowden was supported by groups like Wikileaks, Anonymous, and others.
- State-sponsored organizations: State-funded groups are believed to be responsible for some of the most sophisticated attacks that are aimed generally at advancing national interests. Most of these attacks

could be considered cyber espionage, through there is increasing concern about the potential for cyber warfare.

So What Do We Do?

Security organizations are re-defining their security defenses to protect against these advanced threats. There is no reason to expect that the tidal wave of sophisticated attacks that enterprises are facing will go away. Over the next decade, enterprises are expected to dramatically reshape their security defenses.

To protect themselves in this elevated cyber security environment, enterprises should:

- Assume they will not be able to prevent all advanced attacks and increase focus on real-time monitoring, detection, and response of applications, information, and users.
- Implement stricter controls around critical business applications and information that are likely targets of attacks and around key users such as those with privileged credentials that are commonly exploited to gain access to network resources.
- Adopt intelligence services to enable a community of users to share security information and enhance the level of protection against security threats.
- Educate employees with best practices training to minimize the risk of them being tricked into sharing credentials or letting malware into the networks.

Traditional security defenses will not and should not go away, but as the effectiveness of these solutions declines, they will become a smaller portion of the overall security budget.

"By 2020, 60% of enterprise information security budgets will be allocated for rapid detection and response approaches, up from less than 10% in 2013." – Gartner

What Is the Role Of the Government?

BALANCE BETWEEN NATIONAL SECURITY AND PRIVACY

Governments have an obligation to protect their citizens and their national interests. But how far should they go to meet these obligations? What happens when national security interests are not aligned with rights or expectations for privacy? Should governments have a legal or moral obligation to be more transparent about their intelligence programs?

The recent exposure of top-secret NSA surveillance programs by Edward Snowden has elevated the debate of how to balance national security with privacy into the global spotlight. Mr. Snowden has been charged with espionage and theft of government property by U.S. federal prosecutors and is currently living in exile in Russia. While he is considered to be a criminal who jeopardized national security by many, he is considered a hero who acted selflessly to fulfill a moral obligation to the public by others.

The invasiveness of the NSA surveillance programs has outraged many people and governments around the world—and is likely to lead to an escalation of intelligence gathering activities by other governments around the world.

Ironically, many people in the security industry find the most amazing thing about Snowden's revelations to be that a contractor has access to so much information and was able to extract it without anyone noticing until it was too late. How could such a sophisticated organization have such poor controls?

GOVERNMENTS AND CYBER ESPIONAGE

There have been rumors of government involvement in cyber espionage for years, but it was not until security firm, MANDIANT, exposed one of China's cyber espionage units, named APT1, and documented its multi-year, computer espionage campaign against 141 companies across 20 industries. Amazingly, the report found that the industries APT1 targets match industries that China has identified as strategic to their growth, including four of the seven strategic

emerging industries that China identified in its 12th Five Year Plan.

"We believe that APT1 is able to wage such a longrunning and extensive cyber espionage campaign in large part because it receives direct government support." – MANDIANT APT1 Report

We would all like to believe it is just China that is involved in cyber espionage, but it is widely believed that many developed nations are also involved in these activities.

IS CYBER WARFARE NEXT?

There is growing concern that the involvement of government-sponsored organizations in cyber security will eventually lead to cyber warfare. Cyber attacks are now considered to be a top national security threat in the 2013 Worldwide Threat Assessment of the U.S. Intelligence Community.

Many people would argue that cyber warfare has already started. The Stuxnet worm that was identified in 2010 is believed to have been created by the United States and Israel to attack specific systems in Iran's nuclear facilities to slow their progress toward developing nuclear capabilities. Iran has responded by increasing its own cyber warfare capabilities, which are comparatively cheaper to develop than a nuclear program or even most conventional weapons systems.

Is cyber warfare the way of the future? Or is it a line we should not cross? While there is certainly the potential for it to be used to prevent wars, the potential damage it could cause is frightening.

A German-American Perspective

Germans and Americans are both concerned about the scope and invasiveness of government surveillance programs, but also realize the necessity of sharing intelligence to prevent terrorist attacks and protecting against cyber risks.

The two countries' attempts to balance privacy and security have come to the fore in the wake of the revelations about the U.S. National Security Agency's

programs. While the NSA's collection activities sparked public outrage and quickly became a campaign issue in Germany, the reaction in the United States was relatively muted. The episode thus highlights what may be a different conception of cyber issues. Germany's history and constitution place a high value on data privacy, but polls show a greater tolerance among Americans for infringements of their privacy in the interest of security.

There have been many information privacy laws and regulations enacted in both the United States and Europe, but those in Germany are considered some of the most stringent. These laws stem in part from Germany's tragic historical experience with violations of privacy and systematic spying on its own citizens. Skepticism in Germany toward well-known American brands like Google, Facebook, and Twitter also reflect a more general reluctance to share personal information in foreign social networks—though this may shift along with generational change. Nonetheless, privacy issues will be a continuing challenge for companies seeking to build relationships with customers on both sides of the Atlantic.

Beyond cultural and regulatory differences, there has also been a persistent technological gap between Germany and the United States. The newest technologies are often developed and implemented in the U.S. several years before they are adopted abroad. This makes it more of a challenge to collaborate and share best practices on issues of common concern like cyber crime or terrorism. As the NSA revelations showed, Germany has often been more a consumer of U.S. intelligence than a producer of intelligence derived from electronic sources.

Will the recent uproar over data privacy have a lasting effect on the German-American relationship?

Should Cyber Security Be Regulated?

It is important to remember that cyber security is not just a national or transatlantic issue—it is truly a global issue. Technological change has outpaced the conceptual thinking of individual governments on cyber issues. This has led has led to a lack of consensus on what activities should be protected, restricted, banned, or regulated. Developing new

rules, institutions, and norms for cyber security will require cooperation between various governments, but also needs to involve private companies, civil society actors, international law enforcement, and international legal experts.

Is the government capable of effectively regulating such a dynamic issue as cyber security? In the wake of the NSA revelations, will countries seek to rely more on domestically sourced technology or work with companies that adopt their own standards and laws? What role might data and privacy issues play in the negotiations between the U.S. and European countries over the Transatlantic Trade and Investment Partnership (TTIP)? We will continue to seek solutions to these questions on both sides of the Atlantic as the role of technology grows.

Additional Analysis on aicgs.org:

- "Security Policy in Cyberspace: The Need for a Transatlantic Debate on the Protection of Data and Privacy," by Constance Pary Baban (11 July 2013).
- "Cybersecurity in Germany Toward a Riskbased Approach," by Jan Neutze, *AICGS* Transatlantic Perspectives (2012).
- "A Reasonable Expectation of Privacy? Data Protection in the United States and Germany," by Jim Harper and Axel Spies, *AICGS Policy Report* 22 (2006).



Located in Washington, D.C., the American Institute for Contemporary German Studies is an independent, non-profit public policy organization that works in Germany and the United States to address current and emerging policy challenges. Founded in 1983, the Institute is affiliated with The Johns Hopkins University. The Institute is governed by its own Board of Trustees, which includes prominent German and American leaders from the business, policy, and academic communities.