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Kevin J. Murphy

USC Marshall School of Business

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KEVIN J. MURPHY

Kenneth L. Trefftz Chair in Finance,
University of Southern California - Marshall School of Business
kjmurphy@usc.edu

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Abstract

On 27 February 2013, the European Union (EU) reached a provisional deal to limit the amount of bankers' bonuses to the amount of fixed remuneration (i.e., a one-to-one ratio); the cap could be increased to 2:1 with the backing of a supermajority of shareholders. I demonstrate that the pending EU regulations restrictions will: (1) increase rather than decrease incentives for excessive risk taking; (2) result in significant increase in fixed remuneration; (3) reduce incentives to create value; (4) reduce the competitiveness of the EU banking sector; and (5) result in a general degradation in the quality of EU investment bankers, thereby decreasing access to capital and increasing the cost of capital in the European Union.

JEL classification: G32, G34, G38, J33, M12, M52, N20

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Regulating Banking Bonuses in the European Union: A Case Study in Unintended Consequences

Kevin J. Murphy
University of Southern California

1. Introduction and Summary

In the aftermath of the 2008-2009 financial crisis, regulators on both sides of the Atlantic have considered or implemented rules designed to curb perceived excesses in both the level of banking bonuses and in the risk-taking incentives provided by those bonuses. In the United States, the evolving regulatory proposals have focused on mandated deferrals of bonuses with explicit clawback provisions; the proposals have stopped short of explicitly limiting the level of banking bonuses or total remuneration. In Europe, evolving regulatory proposals have focused on limiting the ratio of variable remuneration to fixed remuneration (e.g., base salaries). In particular, in February 2013, the European Union (EU) reached a provisional deal to limit the amount of bankers' bonuses to the amount of fixed remuneration (i.e., a one-to-one ratio); the cap could be increased to 2:1 with the backing of a supermajority of shareholders. The provisional agreement – added as an amendment to the fourth Capital Requirements Directive (CRD-IV) – is expected to be formally approved by the European Parliament and Council by June 2013 and effective as early as January 2014.

The purpose of this report is to provide an economic analysis of the consequences of the pending European restrictions on banking bonuses. The articulated objectives of the proposed cap are to reduce excessive risk taking and to reduce perceived excesses in the level of banking remuneration. I show that the proposed cap is unlikely to achieve either objective. In particular, my primary predictions are briefly summarized as follows:

- The cap on pay ratios will increase the level of fixed remuneration, making banks much more vulnerable to business cycles and downturns and thus significantly increasing the risk of bank failure.
- The cap on pay ratios will not decrease “excessive” risk taking. In fact, the existing bonus system – characterized by below-market salaries and high bonus opportunities – provides

strong incentives to avoid “bad” risks and to take “good” risks, while the “capped” bonus system provides incentives to take bad risks and avoid good risks.

- The cap on pay ratios will reduce incentives to create value. By focusing only on excessive risk taking, the regulators ignore the more important purpose of banking bonuses: to link pay and performance and to provide incentives for employees to take actions that increase value for shareholders and, ultimately, society. Without question, capping variable remuneration at some multiple of fixed remuneration reduces the sensitivity of pay and performance. Moreover, the “variable” portion of pay will predictably become less variable, further reducing the sensitivity of pay and performance.
- While capping the pay ratio will lead to higher levels of fixed remuneration (continuing the trend evident since the crisis), it will *not* lead to lower levels of overall remuneration after adjusting for ability and the risk of the remuneration package. Ultimately, the remuneration for top-performing investment bankers is set in the highly competitive global marketplace, and not by the European Parliament or other regulators. Top-performing investment bankers will predictably have employment opportunities in non-EU banks and other non-bank financial intermediaries not subject to EU restrictions on pay ratios. EU banks will have to offer competitive market remuneration, or they will predictably lose their most-talented and most-valued employees. Indeed, to the extent that total remuneration is reduced by the proposed regulations, it will reflect a less-talented workforce as the top producers leave for better-paying opportunities in financial firms not subject to the pay restrictions.
- The cap on pay ratios will reduce the competitiveness of the EU banking sector relative to non-EU banks and other non-bank financial intermediaries and financial-service providers not subject to the EU restrictions. The overall effect of the proposed restrictions will be to reduce bank flexibility, profitability, and shareholder value, while stifling innovation and creativity in EU capital markets. Among the predictable casualties are the EU member states as issuers and guarantors of sovereign debt.
- The cap on pay ratios will do nothing to cure problems and deficiencies in existing bonus arrangements. In particular, the proposed cap does not address potential problems with

performance measurement. These performance measurement problems are inherently solvable, but not through one-size-fits all restrictions imposed through regulation.

My report proceeds as follows. In Section 2, I provide context for my analysis by describing how the structure of banking bonuses has evolved over time and how remuneration has been impacted by the financial crisis due to both economic and political pressures. I also describe and contrast the current regulations and proposals affecting banker remuneration emanating from the United States and the European Union. In Section 3, I analyze how capping the ratio of variable-to-fixed pay will impact risk taking, remuneration levels, and the competitiveness of the EU banking sector. Section 4 provides examples of the counter-productive and unintended consequences associated with similar attempts to regulate executive remuneration, drawing primarily from the long history of pay regulation in the United States.

2. The Evolution of Banking Bonuses

2.1. The Beginning of the Banking Bonus Culture

The heavy reliance on bonuses has been a defining feature of investment-banking remuneration for decades, dating back to the days when investment banks were privately held partnerships. Such firms kept fixed costs under control by keeping base salaries low and paying most of the remuneration in the form of year-end cash bonuses based on realized company profits. Indeed, the initial purpose for year-end cash bonuses was not the provision of incentives, per se, but rather a mechanism to ensure that remuneration expense would be low in years with low profitability, and high in years with high profitability. Even the so-called “base salary” was often merely a draw on year-end bonuses, and not a truly fixed or guaranteed floor on annual total remuneration. This wage flexibility was especially important in the highly cyclical financial-services sector.

The basic banking-bonus structure remained intact when the investment banks went public, but the cash bonuses were replaced with a combination of cash, restricted shares, and stock options. Base salaries continued to constitute only a small portion of total remuneration

for virtually all professional staff, including those in entry-level positions. In addition, year-end bonuses (in cash and equity) were increasingly used explicitly as incentives, to reward employees based on individual, group, and firm performance.

In the United States, the 1933 Banking Act (often called the “Glass-Steagall Act”) prohibited commercial banks from offering investment-banking services such as issuing, underwriting, selling, or distributing securities. Regulatory changes beginning in the 1960s – and culminating in the 1999 Gramm-Leach-Bliley Act (which effectively repealed large sections of Glass-Steagall) – allowed commercial banks to offer an increasing array of services traditionally associated with investment banks. In order to compete with investment banks in the marketplace, commercial banks also had to compete in the labor market for investment bankers, which meant offering remuneration packages commensurate to those in investment banking. Commercial banks offering investment-banking services faced a growing tension between its traditional commercial bankers – paid high salaries with relatively little performance-based pay – and the professionals in its investment-banking divisions. Ultimately, commercial banks began offering investment-banking-type remuneration for top performers throughout the organization.

The potential rewards and unlimited upside available to top performers allowed financial services firms to attract the best and brightest college, MBA, and PhD graduates. The top performers in financial services firms typically have scarce and highly specialized skills that are specific to their industry but not necessarily to their employer. As a result, employees in financial services are remarkably mobile both domestically and internationally when compared to employees in virtually any other sector in the economy. This mobility has increased overall levels of remuneration, as investment and commercial banks compete with each other and (increasingly) with private equity and hedge funds on a global basis for scarce talent.

To many outside observers, financial intermediation appears to be a zero-sum game (or even a negative-sum game) where investment bankers and other financial intermediaries move euros, dollars, or pound sterling from place to place but do not actually create value. However, concurrent with the expansion in investment bankers and their bonuses was a financial revolution that created trillions in value (measured in euros, dollars, or pounds). The

expansion of original-issue high-yield debt in the 1980s, for example, created a new source of capital that rescued hundreds of small and midsize corporations and, by allowing entrepreneurs with little capital to borrow large amounts, fundamentally changed the market for corporate control. The expansion of derivative markets in the 1990s allowed corporations in all sectors to hedge against price and other risks and dramatically reduced their risk exposure. The expansion of securitization in the 1990s and 2000s allowed holders of residential and commercial mortgages to pool and share the associated risks with diversified investors. The expansion of collateralized debt obligations and credit default swaps also allowed a more-efficient allocation of risk among diversified and heterogeneous investors. As the demand for these increasingly complex financial instruments increased, so did the demand for sophisticated finance professionals.¹

While some might argue that it would be better to have the “best and brightest” college, MBA, and PhD graduates become doctors or public servants and not investment bankers, one of the great advantages of a capitalist free-market global economy is its propensity to move resources to higher-valued uses. The best and the brightest were attracted to financial services firms because of the unlimited upside potential the firms offered for top performers, but this “potential” was available only to the extent that the consumers of financial services (e.g., entrepreneurs, small and large firms, start-ups and mature firms, growing and shrinking firms, state and private pension plans, mutual funds, endowments, private-equity firms, venture capitalists, consumers, individual investors, hedge funds, other institutional owners, and issuers and guarantors of sovereign debt) greatly valued those services. Investment banking is not a zero-sum game, but in fact creates tremendous value by allowing low-cost access to existing or new sources of capital, allocating the inherent risk of this capital more efficiently, and matching buyers and sellers of capital.

¹ Like all innovations, financial innovations can be used unproductively as well as productively. Some banks or investors apparently used these inherently risk-reducing instruments to make un-hedged (and hence highly risky) bets, and the failure of these bets likely contributed to the recent financial crisis. However, the limited misuse or abuse of these instruments should not diminish their productive role in creating value by creating new sources of capital and by allowing risk to be shared more efficiently.

2.2. Banking Bonuses and the Financial Crisis

The so-called “Wall Street bonus culture” became highly controversial in the United States in early 2009 amid revelations that Merrill Lynch paid substantial year-end bonuses to its executives and employees after receiving bailout funds and just prior to completion of its acquisition by Bank of America. The outrage heightened following the revelation that insurance giant American International Group (which had received over €122 billion of federal bailout funds) was in the process of paying €121 million in “retention bonuses” to its executives.² The public anger over these payments – coupled with beliefs that Wall Street bonuses were a root cause of excessive risk taking that helped create the ongoing global financial crisis – led to an effective prohibition on cash bonuses for participants in the government’s Troubled Asset Relief Program (TARP) and to more-sweeping regulation of executive remuneration as part of the July 2010 Dodd-Frank Wall Street Reform Act.

The anger over bonuses paid by troubled financial institutions was not restricted to the United States. In March 2009, pressure mounted on both the French government to limit banking bonuses after the French bank Natixis SA revealed plans to pay its traders €70 million in bonuses for 2008.³ In the same month, Germany’s federal finance minister called for a return of Dresdner Bank’s 2008 “obscene” bonuses.⁴ In August 2009, both Germany and France announced new rules limiting banking bonuses, and French President Nicolas Sarkozy urged leaders of the world’s top 20 developed nations (“G20”) to follow suit.⁵ In early September 2009, the finance ministers of Sweden, the Netherlands, Luxembourg, France, Spain, Germany and Italy jointly demanded that banking bonuses be spread over several years, and called for an outright ban on bonus guarantees.⁶ In addition, President Sarkozy was joined by United Kingdom (UK) Prime Minister Gordon Brown and German

² US dollar amounts converted to Euros at the 31 Dec 2008 exchange rate of 1:1.3919.

³ Moffett, “France Faces Pressure Over Bonuses As Natixis Sets \$94.6 Million Payout,” *The Wall Street Journal* (2009).

⁴ “Call for Dresdner execs to return bonuses get mixed response,” *Banking Newslink* (2009).

⁵ Smith, “Germany’s BaFin Clamps Down On Bank Risk Mgmt, Bonuses,” *Dow Jones International News* (2009); Davies, “France announces bank bonus crackdown and urges G20 nations to follow suit,” *The Guardian* (2009); “Germany backs calls to limit banker bonuses,” *Agence France Presse* (2009); “G-20 Leaders Near Bank-Pay Limits Amid Protests,” *Associated Press* (2009).

⁶ “G20 : Buzek Backs Calls to Limit Bankers’ Pay,” *Europolitics* (2009).

Chancellor Angela Merkel in demanding reforms of “reprehensible practices” within the global banking system.⁷

The precise causes of the global financial crisis will be debated for decades (just as the precise causes of the 1930s depression are still being debated), and it is beyond both the scope of this report and of my ability to provide a detailed account here. However, the evolving consensus suggests that (1) the crisis was related to the collapse in US housing prices (ultimately spreading to a EU sovereign-debt crisis), and (2) the risk-taking contributing to the crisis reflected a combination of factors (at least in the United States) including social policies on home ownership, loose monetary policies, “Too Big to Fail” guarantees, and poorly implemented financial innovations. These different factors, however, have nothing (or little) to do with the banking bonus culture.

Indeed, a reasonable description of the crisis is that it was driven not by excessive risk taking but rather the mistaken assumption that housing prices would continue to appreciate.⁸ Ultimately, home prices that were being artificially bid up by borrowers who could not realistically qualify for or repay their loans could not continue to increase. When home prices began falling, borrowers who previously would have refinanced or sold their homes at a profit could do neither, which escalated the pace of foreclosures. Banks who would previously break even on foreclosed properties now faced huge losses, and the investors of the associated mortgaged-back securities or CDOs also suffered. The globalization of world trade and long-term capital meant that banks and investors worldwide were affected by the burst in the US housing bubble (Turner (2010)).

The maintained assumption of continued appreciation was a mistake of epic proportions, obvious in hindsight but not during the housing boom. But, it was not a mistake driven by banking bonuses, and most large commercial and investment banks (and their executives) suffered greatly. Indeed, to the extent that compensation systems contributed to the crisis (such as rewarding loan officers for loans written with little regard to whether the

⁷ Monaghan, “Brown sets out plan for bonus clampdown,” *The Daily Telegraph* (2009).

⁸ Warren Buffet, for example, called this assumption a “mass delusion” shared by “300 million Americans,” and Citigroup’s CEO called the collapse in housing prices “wholly unanticipated” (Angelides, et al. (2011), p. 3).

loan could be repaid⁹), it was because the bonuses themselves were designed under the assumption of continued appreciation, and not that the bonuses *led* to the assumption of continued appreciation.

2.3. Banking Bonuses Before and After the Crisis

The 2007-2009 financial crisis had important consequences for the realized remuneration in large financial services institutions. Table 1 reports the ratio of variable pay to fixed pay for EU and US CEOs in banks identified as “Global Systemically Important Banks” (G-SIBs) by the Financial Stability Board as of November 2012. Annual remuneration levels and structures for each of the banks in Table 1 are detailed in Figure 1 (European Union) and Figure 2 (United States).¹⁰

As shown in Table 1, the median ratio of variable-to-fixed remuneration for CEOs in EU and US G-SIBs fell significantly during the crisis years from its pre-crisis level, and fully or partially rebounded in the post-crisis years. For example, the median ratio for CEOs in large EU banks fell from 1.8 in 2006-2007 to only 0.2 in 2008, fully rebounding to 1.8 by 2010. The median ratio for CEOs in large US banks fell from 24.5 in 2006 to 0 in 2008, and partially rebounded to 14.0 and 9.3 in 2010 and 2011, respectively. As shown in Figures 1 and 2, the level of pay for G-SIB CEOs in the post-crisis period is generally lower than pay in the pre-crisis period. Figure 1 shows that only five of the eleven EU CEOs had higher pay in 2011 than in 2006.¹¹ Similarly, Figure 2 shows that CEO pay rose for only one of the eight US CEOs.

Ultimately, the most striking difference apparent in Table 1 is the different pay practices in the European Union compared to the United States. In particular, CEOs of US G-SIBs receive a significantly higher fraction of their pay in the form of cash bonuses, restricted shares, and stock options in profitable years than do their European counterparts. In

⁹ As discussed in detail in Section 3.6 below, paying loan officers on the quantity rather than the quality of loans is a performance-measurement problem, and not a risk-taking problem.

¹⁰ Because of scant data availability for G-SIBs outside the European Union and United States, my remuneration analysis focuses on EU and US CEOs.

¹¹ Pre-crisis data are unavailable for UniCredit.

essence, the pay for US CEOs is consistent with the articulated objective of providing low pay in years with low profitability, and high pay in years with high profitability.

As discussed more fully below, G-SIBs and other large banks faced increased political pressure to reduce the variable portion of pay in the aftermath of the financial crisis. The remuneration trends depicted in Table 1 and Figures 1-2 could therefore reflect both a response to these political pressures as well as the normal fluctuation in pay ratios associated with fluctuations in performance. Survey evidence reported by Towers Watson (2011) suggests that post-crisis pay decisions in the United Kingdom and Germany were driven primarily by business, economic, and competitive factors and not by regulatory and political pressures.¹²

Nonetheless, there is some evidence that political pressures are having some effect. In particular, while the overall level of pay fell from 2006 to 2011 for 14 of the 21 EU and US G-SIB CEOs in Table 1, the level of fixed remuneration increased. In particular, base salaries increased for 11 of the 13 EU CEOs and only decreased for two EU CEOs. Similarly, base salaries increased from 2006 to 2011 for four of the eight US CEOs; salaries fell for two CEOs and were unchanged for two. In addition, a 2012 survey of 13 EU banks by McLagan (AFME (2012)) finds that fixed remuneration for “banking and capital market professionals” (including equities, fixed income, and investment banking) increased 37% between 2007 and 2011.

2.4. Recent Regulatory Developments: United States

In July 2010, President Obama signed into law the Dodd-Frank Wall Street Reform and Consumer Protection Act or Dodd-Frank Act, which was the culmination of the President and Congress’s controversial and wide-ranging effort to regulate the financial services industry. While the pay restrictions in the TARP legislation applied only to banks receiving government assistance, the Dodd-Frank Act goes much further by regulating pay for *all* financial institutions (TARP recipients and non-recipients, public and private, including

¹² In particular, 84% of the UK Human Resources executive surveyed, and 63% of the German HR executives surveys, cited business, economic, and competitive factors as the primary driver of remuneration decisions. In contrast, only 11% and 21% of the UK and German HR executives, respectively, cited regulatory and political pressures as the primary driver. See Towers Watson (2011), Table 4.

Fannie Mae and Freddie Mac and US-based operations of foreign banks). Specifically, Part (a) of Section 956 of the Dodd-Frank Act requires all financial institutions to identify and disclose (to their relevant regulator) any incentive-based remuneration arrangements that could lead to material financial loss to the covered financial institution, or that provides an executive officer, employee, director, or principal shareholder of the covered financial institution with excessive remuneration, fees, or benefits. In addition, Part (b) of Section 956 of the Dodd-Frank Act prohibits financial institutions from adopting any incentive plan that regulators determine encourages inappropriate risks by covered financial institutions, by (1) providing an executive officer, employee, director, or principal shareholder of the covered financial institution with excessive remuneration, fees, or benefits; or (2) that could lead to material financial loss to the covered financial institution.

The responsibility for implementing Section 956 of the Dodd-Frank Act fell jointly to seven agencies: the Securities and Exchange Commission, the Federal Reserve System, the Office of the Comptroller of the Currency, the Office of Thrift Supervision, the Federal Deposit Insurance Corporation, the National Credit Union Administration, and the Federal Housing Finance Agency. In March 2011, the seven agencies issued a joint proposal for public comment, modeled in part on Section 39 of the Federal Deposit Insurance Act. While the proposal stops short of explicitly limiting the level of executive remuneration, it prohibits remuneration that is unreasonable or disproportionate to the amount, nature, quality, and scope of services performed. In addition, the proposal calls for firms to identify individuals who have the ability to expose the firm to substantial risk, and demands that (for the larger institutions) such individuals have at least 50% of their bonuses deferred for at least three years; deferred amounts would be subject to forfeiture if subsequent performance deteriorates. The “Comment Period” (i.e., when the various agencies invite comments on the proposed rules) ended in May 2011, but final rules have not yet been announced.

2.5. Recent Regulatory Developments: The European Union

In April 2009, the “Group of 20” (G20) leading economies established the Financial Stability Board (FSB) to flag potential problems in the global financial system. The newly formed FSB immediately issued guidelines for banking bonuses, recommending that bonuses

should be adjusted for the risk the employee takes, should be linked to performance, should be deferred to take account of the duration of the risks being taken, and should be paid in a mixture of cash and equity.¹³ In August 2009, French President Sarkozy indicated that he would push for limits on banking bonuses at the upcoming G20 summit. Ultimately, President Sarkozy's hope for the G20 nations to agree to a global cap on banking bonuses failed after the UK and United States indicated that the proposed cap was too restrictive.¹⁴ However, at the Pittsburgh G20 summit, the world leaders agreed to pay regulations proposed by the Financial Stability Board. Under the FSB proposals, which would apply only to the finance sector:

- At least 40% of each executive's bonus would be deferred over a number of years, rising to 60% for the bonuses of the most senior executives.
- The deferral period should be at least three years with at least half paid in the form of restricted shares rather than cash.
- Cash payments should be subject to clawback provisions.

The FSB's proposals were designed as an international framework, leaving it to each country to pass country-specific legislation to implement it. Ultimately, in spite of the fact that President Obama had agreed to the FSB framework, the US Federal Reserve (the key banking regulator in the United States) rejected the FSB recommendations, arguing that a single formula-based approach could exacerbate excessive risk taking.¹⁵ However, most EU countries embraced the recommendations and committed to have legislation in effect by early 2010. By late 2009, German banks agreed to voluntarily adopt the FSB recommendations ahead of formal legislation, and the Italy's central bank began pressuring its country's six largest banks to comply immediately.¹⁶ By March 2010, eight G20 countries – including the

¹³ Larsen, "Rules unlikely to end bonus furore," *Financial Times* (2009).

¹⁴ Jagger and Frean, "Sarkozy back-pedals over his demands for worldwide cap on banking bonuses," *The Times* (2009).

¹⁵ Braithwaite, Guha and Farrell, "Fed rejects global formula for bonuses," *Financial Times* (2009).

¹⁶ Wilson, "German banks set to speed up pay reform," *Financial Times* (2009); "C-bank calls upon Italian banks to stick to managers' pay rules," (2009). Italy's UniCredit indicated that it was already in full compliance "Unicredit: New Salary Regulations Already Implemented," *ANSA - English Corporate News Service* (2009);

UK, France, and Germany – had adopted new remuneration regulations consistent with the FSB recommendations.

In March 2010, a top lawmaker in the European Parliament proposed that there should be “an appropriate balance” between bonuses and salaries, and that bonuses should not make up more than 50 per cent of total annual remuneration.¹⁷ The Parliament’s Committee on Economic and Monetary Affairs (ECON) formally recommended capping the ratio of variable-to-fixed remuneration in June 2010.¹⁸ The proposed cap on variable pay was ultimately dropped on June 30 after negotiations with the Council of Ministers and the European Commission.¹⁹ Instead, the Parliament approved rules largely in line with the earlier FSB recommendations.

In December 2010, the Committee of European Banking Supervisors (CEBS) – charged with drafting guidelines to implement the European Parliament proposal – released its final bank remuneration rules. Under the new rules, a minimum of 40% to 60% of variable pay must be deferred over three to five years, and subject to forfeiture based on future performance. In addition, at least 50% of the variable pay (deferred or not) must be paid in the form of stock or other share-based instruments subject to “retention periods.” In combination, these guidelines limit the upfront cash portion of bonuses to as little as 20% of the total (that is, half of the non-deferred portion of pay), much of which would be needed to pay the income taxes on the vested but nontransferable stock grants.

In April 2012, the European Parliament revisited the idea imposing a cap of 1:1 on the ratio of variable to fixed remuneration, and the following month ECON approved (by a vote of 42 to 1) the 1:1 ratio as an amendment to the fourth Capital Requirements Directives (“CRD-IV”).²⁰ In August 2012 the Parliament rejected a Danish presidency compromise to increase the ratio to 3:1 for board members and 5:1 for others. Later that month, the European Commission rejected the Parliament’s 1:1 proposal, indicating its preference to

¹⁷ Tait, “MEPs seek tougher curbs on bankers’ bonuses,” *Financial Times* (2010).

¹⁸ “Financial Regulation: Econ Deputies Vote to Slash Bank Bonuses,” *Europolitics* (2010).

¹⁹ Aldrick, “Brussels backs down on bonus caps for bankers,” *Daily Telegraph* (2010).

²⁰ Blackden and Rowley, “Brussels moves to cap banker bonuses,” *Daily Telegraph* (2012); “European Parliament panel backs cap on bank bonuses,” *Reuters News* (2012).

separate remuneration issues from CRD-IV.²¹ In December 2012, the Parliament postponed its key vote on the pay ratio until 2013.

By mid-February 2013, final approval of CRD-IV was threatened by the European Parliament's insistence on the bonus cap. On 27 February 2013, the Parliament and the EU Council of Ministers announced a compromise:²²

- The ratio of variable-to-fixed remuneration would be capped at 1:1, but could be increased to 2:1 with the backing of a supermajority of shareholders (defined as favorable votes from 65% of shareholders owning at least half the shares represented, or favorable votes from 75% of shareholders if there is no quorum).
- Variable pay includes “any employee benefits beyond those required by law.”
- Up to 25% of the variable pay may potentially be discounted (which could raise the ratio above 1:1 or 2:1) if paid in the form of “long-term deferred instruments” that are deferred for at least five years.
- Consistent with the current FSB framework, at least 40% (and, for some executives, at least 60%) of the variable remuneration is required to be deferred over a period which is not less than three to five years.
- Up to 100% of the variable remuneration must be subject to malus or clawback.
- The restrictions will apply to the worldwide employees of banks headquartered in the European Union, Iceland, Liechtenstein, and Norway (collectively, the European Economic Area or “EEA”).

Implementation details (including definitions of and potential discounts on the value of the long-term deferred instruments) were delegated to the European Banking Authority (EBA), the successor to the CEBS. Although the full text of the 27 February compromise was not available at the time of this report, it is expected that the restrictions will apply to the EU-based employees of non-EU headquartered banks. The provisional agreement is expected to be formally approved by the European Parliament and Council by June 2013. The

²¹ Dale, “EU plan to cap bankers’ bonuses under threat,” *Money Marketing* (2012).

²² European Union (2013). *Presidency Flash Note: CRD4/CRR, Results of the Trilogue of 27 February 2013*.

effective date for the new restrictions is still uncertain, but could be effective as early as January 2014.

3. Expected Impact of Regulating “Pay Ratios”

Proponents of capping the ratio of variable-to-fixed pay at 1:1 (or any other number) have two articulated objectives: (1) reducing incentives to take excessive risks; and (2) reducing overall levels of remuneration for investment bankers perceived (by some) to be excessive. While, as a logical proposition, it is impossible to “prove” the impact of any regulation prior to enactment, reasonable predictions can be reached through economic analysis and drawing from decades of evidence on prior attempts to regulate executive remuneration. Similar to the results of such prior attempts, I predict that the proposed regulation will result in a variety of unintended and unproductive side effects, make pay less efficient, hinder banks’ ability to attract, retain, and motivate its employees, and do little (if anything) to reduce perceived excesses in risk taking or remuneration levels.

3.1. The proposed cap on pay ratios will increase fixed remuneration

The most-obvious and undisputed consequence of capping the ratio of variable-to-fixed remuneration is an increase in the level of fixed remuneration. Indeed, as documented above in Section 2.3, there is already evidence that the level of fixed remuneration is increasing for both G-SIB CEOs and lower-level banking professionals. As discussed next in Section 3.2, increasing the level of fixed remuneration decreases the penalties associated with poor performance, which in turn *increases* rather than *reduces* incentives to take risks.

Perhaps more importantly, increasing the fixed component of remuneration increases the risk of bank failure. Demand for financial services (and especially investment-banking services) is highly cyclical. Recall from Section 2.1 that the banking bonus culture emerged from a desire to keep the sector’s most important expense – labor costs – variable, which in turn allowed investment banks to survive business cycles and downturns. Under the new EU restrictions, labor costs become essentially a large fixed expense, making banks less flexible much more susceptible to industry shocks.

3.2. The proposed cap on pay ratios will not decrease “excessive” risk taking

The European Parliament’s primary justification for proposing caps on pay ratios is to “end incentives for excessive risk taking.”²³ Underlying this “justification” is the unproven allegation that the structure of banking bonuses has, in fact, been responsible for excessive risk taking in the financial services industry. Indeed, pressures to reduce the importance of variable remuneration have emerged without a definition of “excessive risk taking” or a guide to distinguishing excessive risk from the normal risks inherent in all successful business ventures.

Bonus plans provide incentives to take risks primarily through asymmetric rewards and penalties: when executives (or traders or brokers) receive rewards for upside risk, but are not penalized for downside risk, they will naturally take greater risks than if they faced symmetric consequences in both directions. To fully mitigate excessive risk taking, the compensation structure would need to be linear across the full range of performance outcomes, including large losses. In practice, the penalties that can be imposed on employees for huge losses are largely limited to loss of employment, reputation, existing wealth, unvested shares, and deferred compensation accounts.

Traditional banking bonus structures provide significant penalties for failure in their bonus plans by keeping salaries below competitive market levels, so that earning a zero bonus represents a significant penalty. In addition, in response to the recent financial crisis, G-SIB remuneration policies now require a large portion of bonuses to be deferred (and subject to forfeiture) and routinely include explicit clawback provisions for recovery of previously granted rewards. While no bonus system in the world can adequately punish an employee for generating huge losses – and while incentives must always be coupled with continuous monitoring systems and risk-control systems to ensure that outsized bets never be allowed to occur – the current banking bonus system does not promote or provide incentives for excessive risk taking.²⁴

²³ Quote from Parliament member Arlene McCarthy, from 30 June 2010 European Parliament press release.

²⁴ Individuals with a larger appetite for risk will naturally be attracted to firms with higher-powered incentives, even with fully linear bonus plans offering symmetric rewards and penalties. Therefore, while the banking bonus culture does not necessarily provide incentives for excessive risk-taking, the culture will

As noted in the preceding section, the level of fixed remuneration will increase as a result of the new restrictions on the ratio of variable-to-fixed remuneration. Increasing the level of fixed remuneration decreases the penalties associated with poor performance, which in turn increases incentives to take risks. Put differently, the restricted system with higher base salaries and lower bonus opportunities actually increases incentives to take risk compared to the traditional banking bonus system.

To illustrate the relevant economic analysis, Figure 3 depicts the relation between pay and performance for an investment-banking employee paid under the traditional remuneration structure and under the regulated regime where bonuses are capped at the level of salary. Under the “Traditional Remuneration Structure” (the solid line), base salary is assumed to be €100,000 and the employee receives 1% of any positive profit. Under the “Capped” remuneration structure (the dotted line), base salary is assumed to be €300,000 and the employee receives 1% of profit above €20 million, with a bonus cap of €300,000.

Suppose that profit is expected to be €20 million, and that the employee has an opportunity to make a risky gamble that will increase profit by an additional €10 million with 50% probability, but decrease profit by €15 million with 50% probability. The employee paid under the traditional system will avoid this (clearly unproductive) gamble, because his bonus will increase by €100,000 if he is lucky, but decrease by €150,000 if he is unlucky. But, this same employee will take the gamble under the regulated system, since his bonus will increase by €100,000 if he is lucky, but will not decrease if he is unlucky (because he receives the same total remuneration when profit is €5 million as he receives when profit is €20 million). Therefore, the lower base salary coupled with higher bonus opportunities actually reduces rather than increases risk-taking incentives.

The relative incentives to take risks changes when high performance would push the employee past the bonus cap in the regulated regime (illustrated in Figure 3 when performance exceeds €50 million). Suppose that profit (before the gamble) was expected to be €50 million. In this case, the employee would not take the gamble under either bonus system. Bonuses under the traditional system would continue to be €100,000 higher if he is

predictably attract a disproportionate share of risk takers. For similar reasons, the culture will also attract a disproportionate share of high-ability, highly motivated, and highly confident individuals.

lucky, and €150,000 lower if he is unlucky. Bonuses under the regulated system would not increase if the employee is lucky (because bonuses are capped at €300,000), but would fall by €150,000 if he is unlucky.

Of course, all risks are not “excessive” risks, and it is worth noting that the challenge historically has been in providing incentives for risk-averse employees to take *enough* risk, not too much risk. Suppose, for example, that profit was expected to be €50 million, and the employee discovers an investment opportunity that will provide €20 million in additional profit with 50% probability, and lose €10 million with 50% probability. Though there is a downside to this investment opportunity, making it increases shareholder value because its expected value is positive. Following the same logic as above, the employee paid under the traditional remuneration structure will make the investment (because the €200,000 “upside” to his bonus is more than the €100,000 “downside”). However, the employee paid under the regulated system will not make the investment, because there is no upside after reaching the bonus cap. Overall, and relative to the employee paid under the traditional banking-bonus structure, the employee paid under the regulated system will avoid gambles with “upside” (since rewards for upside performance are capped) but will take gambles with “downside” (since penalties for downside performance are also capped).

To summarize, the traditional bonus system – characterized by below-market salaries and high bonus opportunities – provides strong incentives to avoid “bad” risks (i.e., those with negative expected values) and to take “good” risks (those with positive expected values). In contrast, the “capped” bonus system provides incentives to take bad risks (because the downside is “capped” at a high base salary) and avoid good risks (because the upside potential from such risks is capped).

In addition, there are other risks associated with the “capped” bonus plan that need to be considered.²⁵ In particular (and drawing again from the example illustrated in Figure 3), employees able to surpass €50 million in profit have incentives to stop producing once they “max out” on their bonuses. In addition, they will do their best to transfer performance results that could have been realized this period into a later period. Similarly, employees who

²⁵ See Healy (1985) and Murphy and Jensen (2011) for a more-thorough discussion of the costs of “non-linear” bonus plans.

believe they cannot achieve at least €20 million in profit this year will also either stop producing or “save” performance for next year. In both of these cases, the “non-linearities” in the capped bonus plan provide incentives for employees to “manage” their performance in unproductive (and sometimes illegal or fraudulent) ways. In contrast, the traditional uncapped bonus plan with below-market salaries is “linear” over a much broader range, which mitigates dysfunctional incentives.

3.3. The proposed cap on pay ratios will reduce incentives to create value

By focusing exclusively on risk taking, the European Parliament has ignored other more-important aspects of the traditional banking-bonus system. In particular, well-designed bonus plans link pay and performance to provide incentives for employees to take actions that increase value through financial innovation and by increasing access to capital and reducing the cost of capital. These incentives are of first-order importance. At best, any associated risk-taking incentives are of second-order importance.

Without question, capping variable remuneration at some multiple of fixed remuneration reduces the sensitivity of pay and performance. As illustrated in Figure 3 and discussed in Section 3.1, imposing the cap on pay-ratios will increase fixed remuneration and significantly reduce the penalties for poor performance, while capping bonuses will reduce the rewards for high performance. Moreover, as discussed in Section 3.4 below, I predict that “variable remuneration” will essentially become part of fixed remuneration, further reducing the sensitivity of pay and performance.

Ultimately, imposing a cap on the ratio of fixed-to-variable remuneration may or may not have an effect on risk-taking incentives. But, imposing such a cap indisputably has an effect on value-creating incentives associated with linking remuneration and performance. Restricting the ability of EU banks to use high-powered incentives destroys value for both shareholders and society.

3.4. The proposed cap on pay ratios will not decrease (ability-adjusted and risk-adjusted) levels of remuneration

The remuneration for top-performing investment bankers is set in the highly competitive global marketplace, and not by the European Parliament or other regulators. As noted above in Section 2.1, the top-performing investment bankers have scarce and highly specialized skills that are specific to their industry but not to their employer, and are remarkably mobile both domestically and internationally when compared to employees in virtually any other sector in the economy. Top-performing investment bankers will predictably have employment opportunities in banks in New York, Singapore, Hong Kong, Zurich, and other financial centers not subject to the cap on the ratio of variable-to-fixed remuneration.²⁶ In addition, top-performing investment bankers will predictably have employment opportunities in private equity firms, hedge funds, mutual funds, money-market funds, and other non-bank financial intermediaries and financial-service providers not subject to the EU restrictions on pay ratios.²⁷ EU banks will have to offer competitive market remuneration, or they will predictably lose their most-talented and most-valued employees.

In order for EU banks to offer competitive market remuneration, they will predictably have to increase the level of fixed remuneration significantly. In addition, I predict that under the pending EU regulation, the remuneration called “variable” will not vary much, and will essentially become part of fixed remuneration. Since risk-averse employees prefer fixed pay to (an equal amount of) variable pay, firms facing binding pay constraints can effectively increase remuneration by reducing the riskiness of variable remuneration, holding constant the expected level of remuneration. I therefore predict that the “variable” portion of pay will

²⁶ On March 3, 2013, voters in Switzerland approved a referendum giving shareholders a binding vote on pay for directors and executive officers, and forbidding salary prepayments, golden handshakes, severance or similar payments, takeover or other transaction premiums, or any other advisory or employment relationships providing for extra benefits. This referendum – which requires modification of the Swiss Federal Constitution – may have a chilling effect on executive remuneration in Zurich banks but will not necessarily affect the remuneration policies for non-executive officers (who are not regulated by the new rules). I predict, however, increasing resistance among incumbent employees to “promotion opportunities” that would subject them to the new restrictions.

²⁷ Non-bank financial intermediaries – often referred to collectively as the “shadow banking system” – are already heavily regulated in the United Kingdom and some other jurisdictions, but (to date) the regulations have not included a cap on the ratio of variable-to-fixed remuneration.

become less variable (that is, less sensitive to performance), especially when the cap is binding, reducing both incentives and bank competitiveness.

Conversely, I predict that banks will attempt to reduce the negative effects of the cap on variable remuneration by expanding the definition of fixed remuneration well beyond “base salaries.” As discussed below in Section 4, US banks participating in TARP and subject to similar restrictions on the ratio of variable-to-fixed remuneration responded by offering “salarized shares,” which were not subject to forfeiture (and thus were considered part of fixed remuneration) but were subject to transferability restrictions (such as prohibiting executives from selling shares received as salary until repayment of TARP funds). The difference between restricted shares and salarized shares was largely semantic and was introduced explicitly to circumvent Congressional intentions.²⁸

Ultimately, the imposition of the cap on pay ratios will clearly make it more difficult and most costly for banks to attract and retain top-performing investment bankers. While restricted to CEOs, the comparison of existing practice in the European Union compared to the United States documented in Table 1 is instructive. The median pay ratio for US CEOs is orders-of-magnitude higher than the pay ratio for EU CEOs, and there is no pending or anticipated legislation in the United States to restrict this ratio for non-TARP recipients.

Although details on the compensation of the CEO and other top executive officers are publicly disclosed and widely available in both the United States and European Union, banks in both regions have historically been highly secretive about the magnitude and distribution of bonuses for its traders and investment bankers. Therefore, it is not possible using publicly available data to compare directly the pre-regulation pay ratios for EU and US investment bankers below the top-executive level. However, following the Merrill Lynch and AIG revelations, the Attorney General of New York subpoenaed bonus records from the nine original TARP recipients, requiring details on the distribution of 2008 bonuses. As documented in Table 2, nearly 5,000 employees in these nine US firms received 2008 bonuses exceeding US\$1 million (approximately €700,000 at the 2008 year-end exchange rate), while over 800 received more than \$3 million (€2.1 million). Coupled with what we

²⁸ In this case, the “circumvention” was endorsed by the Obama administration, which was opposed to the restrictions passed by Congress and favored uncapped grants of restricted shares vesting only after TARP was repaid. See Murphy (2010) for details.

know about the low base salaries in this sector, these data suggest that the high ratio of variable-to-fixed remuneration in US banks documented in Table 1 is not limited to the top executive level.

Given the high disparity in reward opportunities in the (post-CRD-IV) EU banking sector compared to US banks, private-equity firms, hedge funds, mutual funds and other shadow-banking providers not subject to the restriction on the ratio of variable-to-fixed remuneration, I predict that there will be a migration of top talent away from EU banks. Indeed, the existing tradition of coupling low base salaries with high bonus opportunities is especially attractive to high-ability individuals, who naturally self-select into firms where pay is highly sensitive to performance. In contrast, remuneration packages with high base salaries and low bonus opportunities are most attractive to lower-ability individuals. Therefore, I predict that there will be a general degradation in the quality of EU investment bankers, which in turn may reduce observed levels of total remuneration. However, to the extent that total remuneration is reduced by the regulations, it will reflect a less-talented workforce as the top producers leave for better-paying opportunities in the less-regulated sector. Such an observed reduction should not be confused with an actual reduction in remuneration holding ability constant. Rather, it should be interpreted as reflecting a misallocation of resources that will increase the cost of capital and reduce access to capital in the European Union, hurting both shareholders and society.

3.5. The proposed cap on pay ratios will decrease bank competitiveness

Imposing a 1:1 (or any other) cap on the ratio of fixed-to-variable remuneration will predictably reduce the competitiveness of the EU banking sector relative to non-EU banks and other non-bank financial intermediaries and financial-service providers not subject to EU regulations. Competitiveness is reduced since, in good years, total remuneration is constrained and the EU banks with restricted pay will lose top talent to banks in financial centers with less regulation and to the unregulated financial sector. In bad years, profits in regulated EU banks – saddled with higher levels of fixed remuneration and performance-insensitive bonuses – will fall relative to profits in less-regulated banks and the unregulated sector. The overall effect of the proposed restrictions will be to reduce bank flexibility,

profitability, and shareholder value, while stifling innovation and creativity in EU capital markets.

Moreover, among the predictable casualties of the migration of EU investment-banking talent and decreased bank competitiveness are the EU member states as issuers and guarantors of sovereign debt. Given the challenging economic environment amid the ongoing Eurozone crisis, member states must increasingly rely on sophisticated, innovative, and highly liquid capital markets. The EU pay restrictions and the associated loss of talent will reduce innovation, creativity, and flexibility in EU capital markets at a time when those traits are needed most.

3.6. The proposed cap on pay ratios will not fix the problem with banking bonuses

As discussed above in Section 3.1, bonus plans provide incentives to take risks primarily through asymmetric rewards and penalties. However, incentive pay can also create incentives for risk taking when bonuses are paid out based on performance measures that reward risky behavior. For example, anecdotal evidence suggests that mortgage brokers were routinely rewarded for writing loans with little or no verification of the borrowers assets or income, receiving especially high commissions when selling more-profitable adjustable-rate (as opposed to fixed-rate) mortgages.²⁹ In the current environment, it has become fashionable to characterize such plans as promoting excessive risk taking. But, the problems with paying loan officers on the quantity rather than the quality of loans is conceptually identical to the well-known problem of paying a piece-rate worker based on the quantity rather than the quality of output. Put simply, these are performance-measurement problems, not risk-taking problems, and characterizing them as the latter leads to impressions that the problems are somehow unique or more important in the banking sector, when in fact they are universal.

A related set of performance-measurement issues occurs when executives (or traders or investment bankers) are paid on short-term rather than long-term results. For example, bankers trading in illiquid assets might be rewarded on the estimated appreciation of the assets on the bonus-payment date, which may bear little resemblance to the gain (or loss)

²⁹ Goodman and Morgenson, "By Saying Yes, WaMu Built Empire on Shaky Loans," *New York Times* (2008).

ultimately realized. If the traders are not held accountable for the long-run value consequences of their actions, they will predictably focus on the quick (if illusionary) profit. This is also a performance-measurement problem and not a risk-taking problem: indeed, trades and investments that generate profits in the short run are typically less risky than trades and investments generating profits only in the longer run.

The solution to the performance measurement problems discussed above (loan officers rewarded for writing too many mortgages, or traders rewarded for short-term results) is to design pay plans that hold employees accountable for the long-run consequences of their actions; such as plans with mandatory deferrals and clawback provisions (as already required under the FSB guidelines).³⁰ The European Union's pending cap on the ratio of variable-to-fixed remuneration does nothing to mitigate these potentially important performance-measurement problems. Moreover, since these problems will inherently differ across banks and individuals, there is not a "one-size-fits-all" solution that can be imposed through regulation.

4. The Law of Unintended Consequences

The pending European cap on banking bonuses is not the first time that regulators have imposed restrictions to curb perceived excesses in remuneration. In this section, I provide examples of prior attempts to regulate pay, drawing primarily on US experiences. While the specific regulations have varied widely over time, they share several common themes. First, the regulations have often been imposed as reactions to perceived abuses in executive pay (and especially the level of pay). Second, with few exceptions, the regulations have generally been either ineffective or counterproductive, typically increasing (rather than reducing) CEO pay and leading to a host of unintended consequences. Third, the "devil" is almost always "in the details" of how the regulation is implemented and enforced.

³⁰ Though beyond the scope of this report, it is worth noting the unintended consequences stemming from the mandated deferrals in Dodd-Frank, the FSB guidelines, and CRD-IV. In particular, these deferrals have made bank accounting statements less informative, as firms conflate or co-mingle amounts paid for past service and future cash awards expected to be paid for current service. In addition, mandated deferrals allow banks to inflate current reported earnings by postponing remuneration expected to be paid based on those earnings.

4.1. Golden Parachutes and Section 280(G)

An important pay-related development in the takeover market of the 1980s was the evolution of golden parachute agreements that awarded payments to incumbent executives who lost their jobs following a change in control. Congress attempted to discourage golden parachutes by disallowing corporate deductions and imposing a 20% additional tax on individual executives for any parachute payments exceeding three times the “base amount” (typically calculated as the individuals’ average total taxable remuneration paid by the company over the prior five years). The new Section 280(G) in the US tax code impacted executive remuneration in several unintended ways:

- The rule designed to limit the generosity of parachute payments led to both a proliferation and a standardization of Golden Parachute payments as companies took the regulation as effectively endorsing agreements paying three times average remuneration.
- Section 280(G) gave rise to the “tax gross up,” in which the company would keep executives “whole” in control transactions by paying the 20% additional tax (as well as taxes paid on the gross-up payment). This gross-up concept was subsequently applied to a variety of executive benefits with imputed income taxable to the executive, such as company cars, club memberships, and personal use of corporate aircraft.
- Since gains from exercising stock options are part of the executive’s taxable income (which increases the “base amount”), Section 280(G) provided incentives for companies to shorten vesting periods in stock option plans, and incentives for executives to exercise stock options even earlier than they would normally be exercised.
- Companies could circumvent the Section 280(G) limitations by making payments available to all terminated executives, and not only those terminated following a change in control, thereby triggering the costly proliferation of Employment and Severance Agreements.

4.2. The Clinton \$1 million Deductibility Cap

The controversy over CEO pay became a major political issue during the 1992 US presidential campaign. After the 1992 election, president-elect Clinton re-iterated his

campaign promise to define all remuneration above \$1 million as unreasonable and therefore nondeductible from corporate taxable earnings. Unintended consequences began immediately: concerns about the loss of deductibility contributed to an unprecedented rush to exercise options before the end of the 1992 calendar year (as companies urged their employees to exercise their options while the company could still deduct the gain from the exercise as a compensation expense), and large investment banks accelerated their 1992 bonuses so that they would be paid in 1992 rather in 1993.

By February 1993, President Clinton backtracked on the idea of making *all* compensation above \$1 million unreasonable and therefore non-deductible, deciding that only pay unrelated to the productivity of the enterprise was unreasonable.³¹ As ultimately implemented, the cap on deductibility applied only to (1) public firms and not to privately held firms; (2) remuneration paid to the CEO and the four highest-paid executive officers; and (3) remuneration not considered performance-based (as defined by Congress).

Ironically, although the explicit objective of the cap was to reduce excessive executive pay levels by limiting deductibility, the ultimate result (similar to what happened in response to the golden parachute restrictions) was a significant *increase* in executive pay. First, while there is some evidence that companies paying base salaries in excess of \$1 million lowered salaries to \$1 million following the enactment of the new rule, many others raised salaries that were below \$1 million to exactly \$1 million. Second, since bonuses based on formulas were considered “performance based” (and hence deductible) while discretionary bonuses were not, companies typically modified bonus plans by replacing sensible discretionary plans with overly generous formulas. Third, and most importantly, since stock options were generally considered performance based (as long as the exercise price is at or above the grant-date market price), the new rule encouraged firms to grant stock options instead of other forms of remuneration. As a result, median pay for S&P 500 CEOs more than tripled in from 1993-2001, driven primarily by an explosion in stock option grants.

³¹ Freudenheim, “Experts see tax curbs on executives’ pay as more political than fiscal,” *New York Times* (1993).

4.3. Sunlight as a poor disinfectant

Under the theory that “sunlight is the best disinfectant,” US disclosure rules have long been a favorite method used by Congress in attempts to curb perceived excesses in executive remuneration. Indeed, most additions to disclosure requirements over time – including perquisite disclosure in the 1970s, enhanced option grant disclosures in the 1993, and actuarial pension values in 2006 – reflect policy responses to perceived abuses. However, there is little evidence that enhanced disclosure leads to reductions in objectionable practices: for example, perquisites increased as executives learned what was common at other firms, and options exploded following the 1993 rules.

4.4. Pay Restrictions for TARP Recipients

The restrictions imposed on US TARP recipients provides a good example of the lengths banks will go to in order to avoid pay restrictions of the type proposed by the European Parliament.³² In February 2009, the US Congress (retroactively) imposed significant pay restrictions on financial institutions that had participated in TARP. Among a variety of other restrictions, the government allowed only two types of remuneration: base salaries (which were not restricted in magnitude), and restricted shares (limited to grant-date values no more than half of base salaries). The forms of remuneration explicitly prohibited under TARP included performance-based bonuses, retention bonuses, signing bonuses, severance pay, and all forms of stock options. Therefore, the TARP legislation effective imposed a 1:2 cap on the ratio of variable-to-fixed remuneration, and further mandated that all variable remuneration be granted in the form of restricted shares.

Industry reaction to the draconian pay restrictions was swift. The TARP pay restrictions were signed into law in February 2009 with the understanding that the US Treasury would work out the implementation details. On June 15, 2009, Treasury issued its “Interim Final Rules,” defining for the first time the true scope of the pay restrictions. On June 17, 2009, five of the eight initial October 2008 TARP recipients³³ – Bank of New York Mellon (\$3

³² For more details, see especially Murphy (2012b) and Murphy (2012a).

³³ Merrill Lynch was also scheduled to receive initial TARP funding, but this funding was deferred given its pending acquisition by Bank of America.

billion), Goldman Sachs (\$10 billion), JPMorgan Chase (\$25 billion), Morgan Stanley (\$10 billion), and State Street (\$2 billion) – repaid the Treasury in full so as not to be subject to the pay restrictions. Bank of America (\$15 billion) and Wells Fargo (\$25 billion) repaid Treasury in December 2009 – just in time to pay 2009 bonuses – and Citigroup (\$25 billion) avoided pay 2010 pay restrictions by converting Treasury’s preferred shareholdings into common stock. In retrospect, the TARP restrictions provide a rare example where the unintended consequences of regulating pay were positive: TARP recipients found the pay restrictions sufficiently onerous that they hurried to pay back the government in time for year-end bonuses. The EU proposal does not, provide a similar “safe harbor” that would allow EU banks to escape the pending regulation.

4.5. Lessons for Europe

Many of the unintended consequences from capping the ratio of variable-to-fixed pay will depend on the implementation details to be specified by the EBA. For example, banks will attempt to find subtle ways within the guidelines to use fixed compensation as a form of variable compensation, such as moving individual salaries up or down based on prior-year performance. The EBA will undoubtedly anticipate the most blatant ways the definitions of fixed and variable pay might be interpreted by banks and employees desiring more flexibility. However, the final guidelines will inevitably allow plenty of scope for costly circumvention. An apt analogy is the Dutch boy using his fingers to plug holes in a dike, only to see new leaks emerge. The only certainty with pay regulation is that new leaks will emerge in unsuspected places, and that the consequences will be both unintended and costly.

Table 1 Ratio of Variable-to-Fixed Remuneration for CEOs in EU and US Global Systemically Important Banks, 2006-2011

	2006	2007	2008	2009	2010	2011
<i>European Union</i>						
Barclays	2.6	3.3	0.0	0.0	2.5	3.7
BBVA	1.6	1.8	2.0	1.8	1.8	1.5
BNP Paribas	2.6	2.5	0.0	1.5	1.8	1.4
Deutsche Bank	10.4	11.0	0.0	7.2	2.8	2.8
Groupe BPCE	0.8	0.2	0.2	0.0	0.0	0.6
Groupe Cr�dit Agricole	0.8	1.0	0.7	0.0	0.0	0.4
HSBC	1.6	0.9	0.0	3.7	2.4	3.6
ING Bank	3.1	2.7	0.0	0.0	0.9	0.0
Nordea	0.4	0.3	0.3	0.3	0.3	0.4
Royal Bank of Scotland	6.3	6.7	5.2	4.4	5.1	5.4
Santander	1.7	1.8	1.3	1.5	1.3	1.9
Standard Chartered	1.9	3.6	2.9	3.7	4.0	3.7
Soci�t� G�n�rale	1.8	1.6	0.0	0.2	2.4	0.9
UniCredit	n/a	n/a	n/a	0.2	0.5	0.0
<i>EU Median</i>	<i>1.8</i>	<i>1.8</i>	<i>0.2</i>	<i>0.9</i>	<i>1.8</i>	<i>1.5</i>
<i>United States</i>						
Bank of America	14.1	12.5	4.8	0.0 ^a	0.0	6.4
BNY-Mellon	12.0	18.3	10.7	9.9	18.0	19.1
Citigroup	23.6	24.3	38.9	0.0	0.0	7.9
Goldman Sachs	54.1	88.3	70.2	0.0	21.8	6.9
JPMorgan Chase	39.7	27.5	34.4	0.0	19.2	15.2
Morgan Stanley	50.6	50.2	0.0	0.0	17.6	15.2
State Street Corp	17.9	18.4	15.6	5.4	10.4	10.7
Wells Fargo	25.5	17.0	9.0	2.3	4.4	5.4
<i>US Median</i>	<i>24.5</i>	<i>21.4</i>	<i>13.2</i>	<i>0.0</i>	<i>14.0</i>	<i>9.3</i>

Note: Fixed pay is typically salary, and variable pay typically includes cash bonuses and the grant-date value of stock and options received during the fiscal year. See notes to Figures 1-2 for details. n/a implies that data are not disclosed.

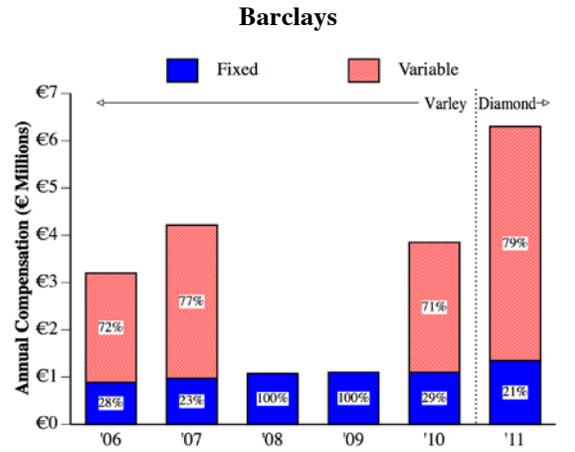
^aCEO received no remuneration for the year.

Table 2 2008 Bonus Pools for Nine Original TARP Recipients

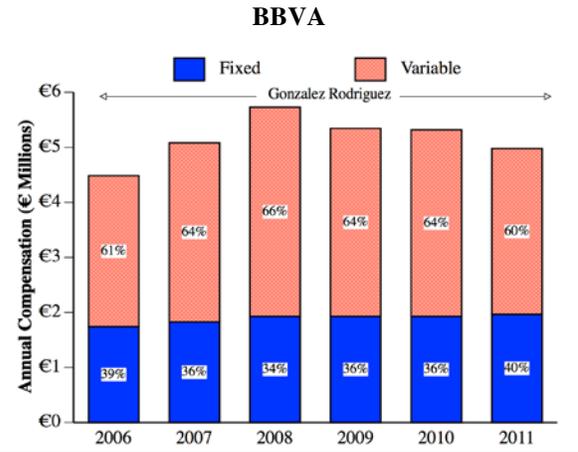
Corporation	2008 Bonus Pool (\$bil)	Number of Employees	Number of Employees Receiving Bonuses Exceeding		
			\$3 mil	\$2 mil	\$1 mil
Bank of America	\$3.3	243,000	28	65	172
Bank of NY Mellon	\$0.9	42,900	12	22	74
Citigroup	\$5.3	322,800	124	176	738
Goldman Sachs	\$4.8	30,067	212	391	953
J P Morgan Chase	\$8.7	224,961	>200		1,626
Merrill Lynch	\$3.6	59,000	149		696
Morgan Stanley	\$4.5	46,964	101	189	428
State Street Corp	\$0.5	28,475	3	8	44
Wells Fargo & Co.	\$1.0	281,000	7	22	62

Source: Cuomo (2009). Wells Fargo losses include losses from Wachovia (acquired in December 2008).

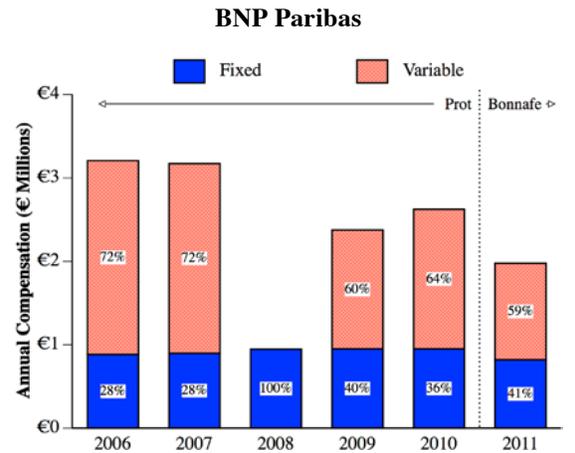
Figure 1 2006-2011 CEO Pay in Global Systemically Important Banks – European Union



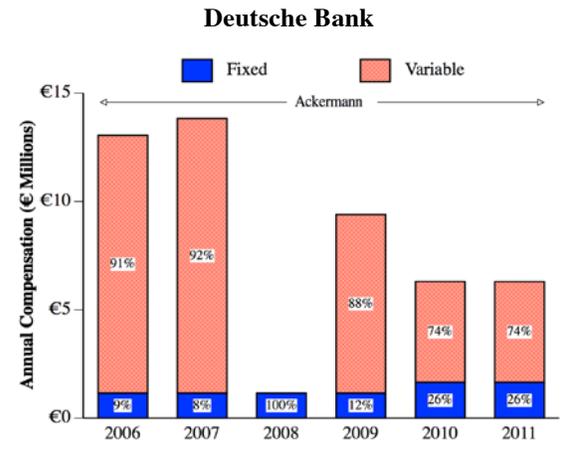
Note: Fixed pay is “base salary.” Variable pay includes current year cash bonus, current year share bonus, deferred cash bonus, deferred share bonus, and grant-date value of long term incentive award.



Note: Fixed pay is “fixed remuneration” as defined by the company. Variable pay reflects payments made in the current year for the previous year’s performance.

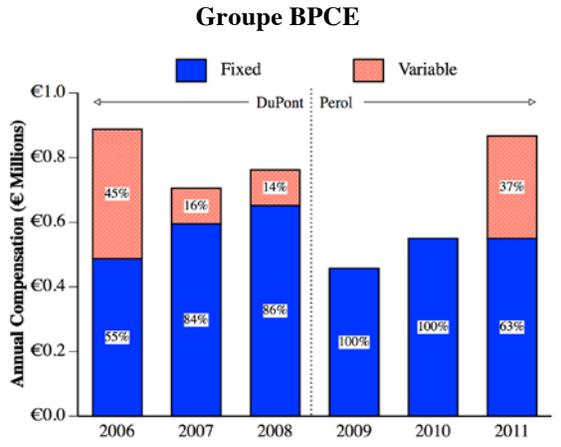


Note: Fixed pay is salary “effectively paid during the year.” Variable pay includes both remuneration paid at the end of the year and deferred remuneration.

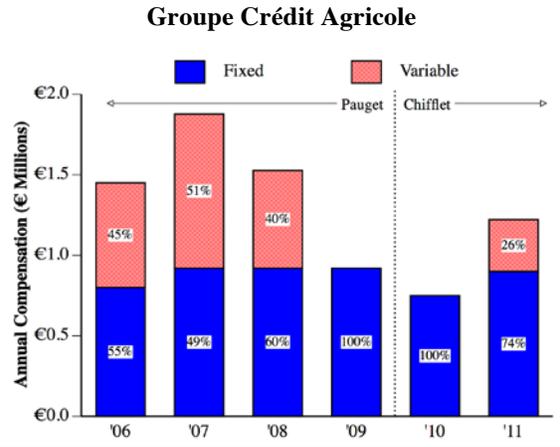


Note: Fixed pay is base salary. Variable pay includes “non-long-term incentive” cash payments, restricted incentive awards, equity upfront awards, and restricted equity awards.

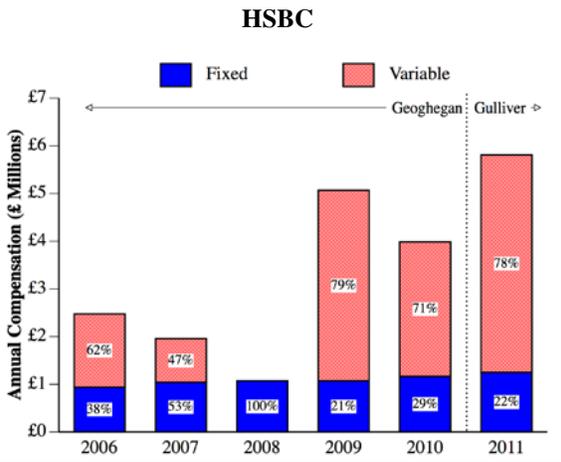
Figure 1 2006-2011 CEO Pay in Global Systemically Important Banks – European Union (continued)



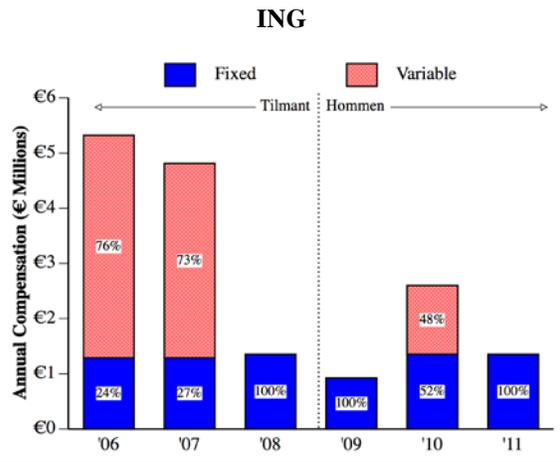
Note: Fixed pay is reported in the “executive directorship” line item. Variable pay includes cash bonuses actually paid during the year, but excludes awards deferred to future years.



Note: Fixed pay is reported as “fixed compensation” while variable pay is reported as being “indexed on Crédit Agricole share price.”

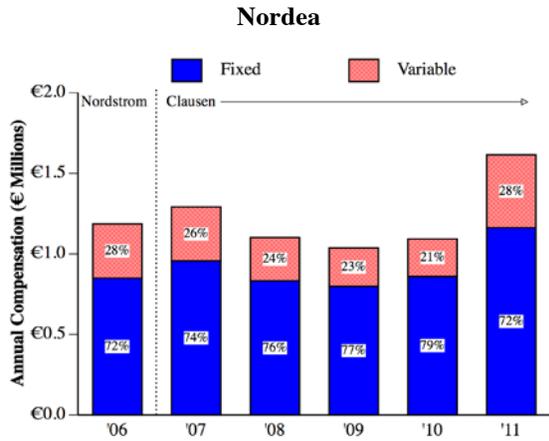


Note: Fixed pay is base salary. Variable pay consists of all cash bonuses plus the value of restricted share holdings that vested that year, plus the non-deferred restricted shares that were paid that year.

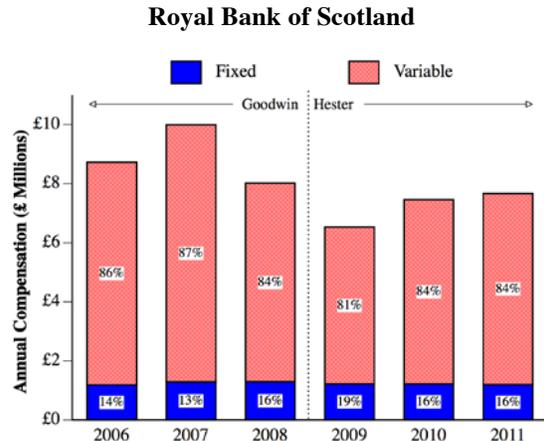


Note: Fixed pay is base salary. Variable pay includes variable remuneration in cash and the fair market value of stock grants.

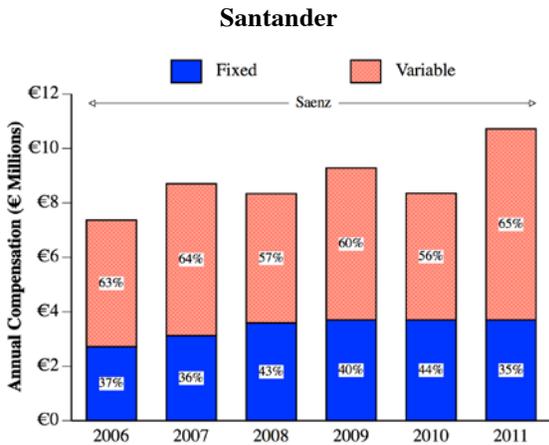
Figure 1 2006-2011 CEO Pay in Global Systemically Important Banks – European Union (continued)



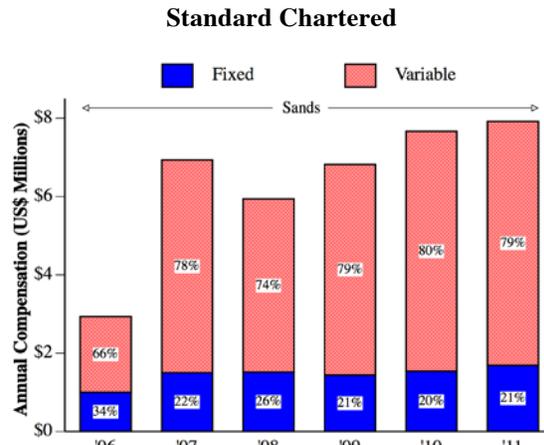
Note: Fixed pay is fixed salary. Variable pay includes variable salary and long-term incentive awards (valued at grant date).



Note: Fixed pay is base salary. Variable pay includes cash bonuses, grant-date values of long-term incentive plan shares plus market price on award times number of deferred awards.

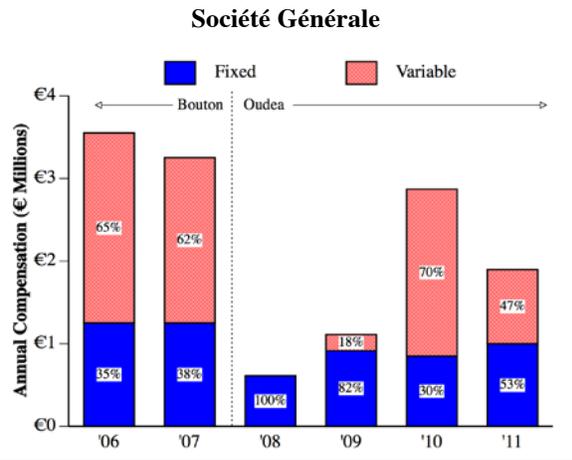


Note: Fixed pay is “fixed remuneration” as reported. Variable pay includes immediate cash and shares as well as deferred cash and shares.

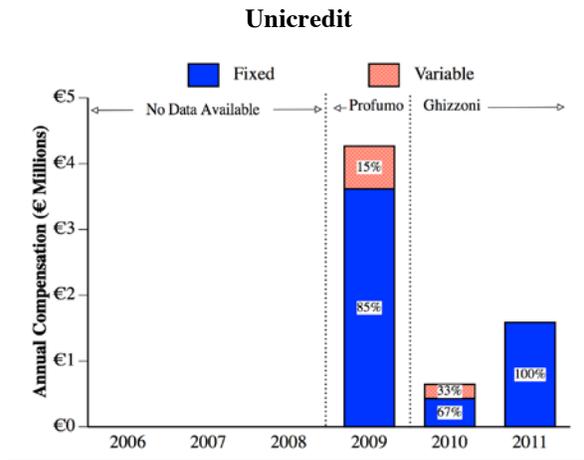


Note: Fixed pay is “salary and fees.” Variable pay includes cash bonuses, deferred shares, voluntary deferred shares, performance share allowances, and performance share plans.

Figure 1 2006-2011 CEO Pay in Global Systemically Important Banks – European Union (continued)

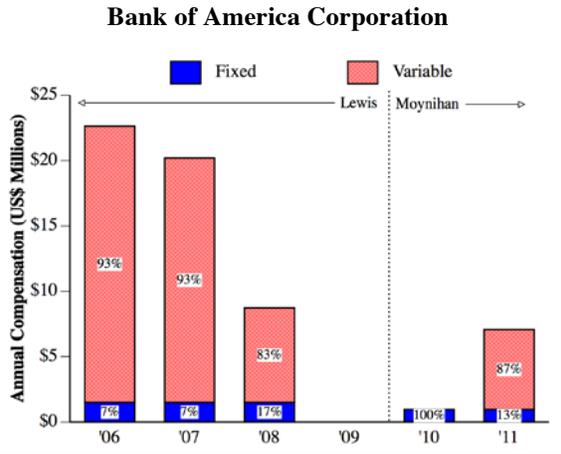


Note: Fixed pay is “fixed salary and times savings account balances.” Variable pay includes “Amounts paid” in the fiscal year, non-deferred, deferred, and additional remuneration.

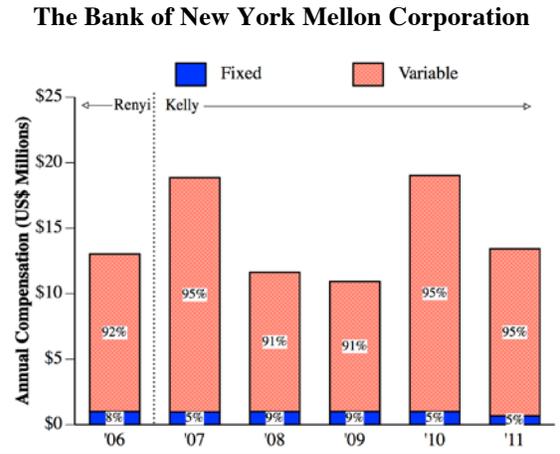


Note: Fixed pay is “fixed and other non-performance-related pay.” Variable pay includes “variable performance pay, including both cash and equity.”

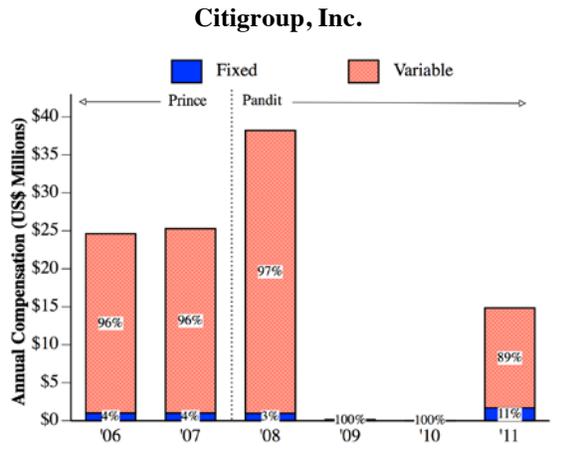
Figure 2 2006-2011 CEO Pay in Global Systemically Important Banks – United States



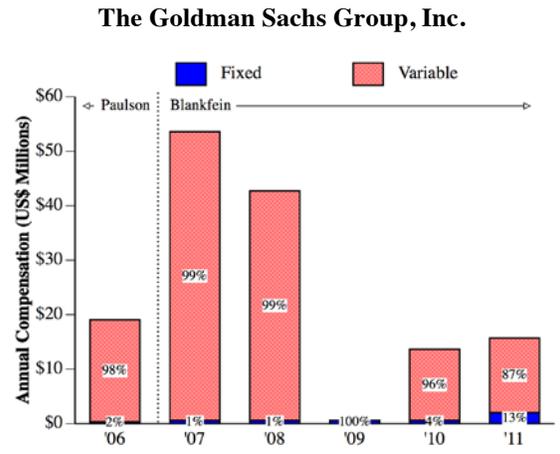
Note: Fixed pay is salary. Variable pay includes cash bonuses and the grant-date value of stock and options received during the fiscal year. Fiscal year 2009 remuneration was restricted under TARP; restrictions lapsed on 9 December 2009.



Note: Fixed pay is salary. Variable pay includes cash bonuses and the grant-date value of stock and options received during the fiscal year. Fiscal year 2009 remuneration was restricted under TARP; restrictions lapsed on 17 June 2009.

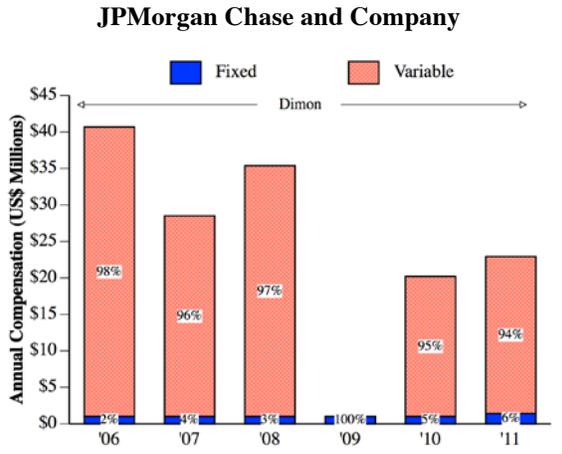


Note: Fixed pay is salary. Variable pay includes cash bonuses and the grant-date value of stock and options received during the fiscal year. Fiscal year 2009 remuneration was restricted under TARP.

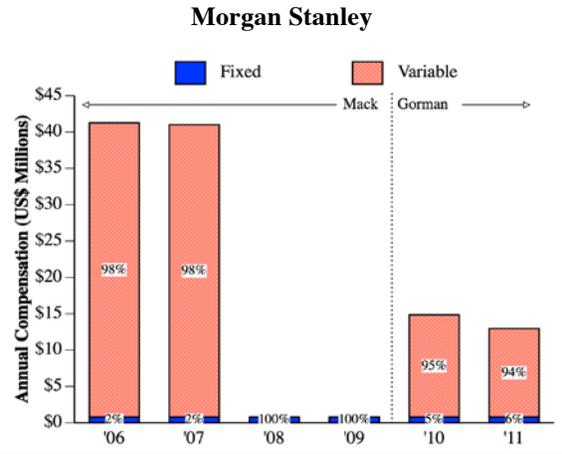


Note: Fixed pay is salary. Variable pay includes cash bonuses and the grant-date value of stock and options received during the fiscal year. Fiscal year 2009 remuneration was restricted under TARP; restrictions lapsed on 17 June 2009.

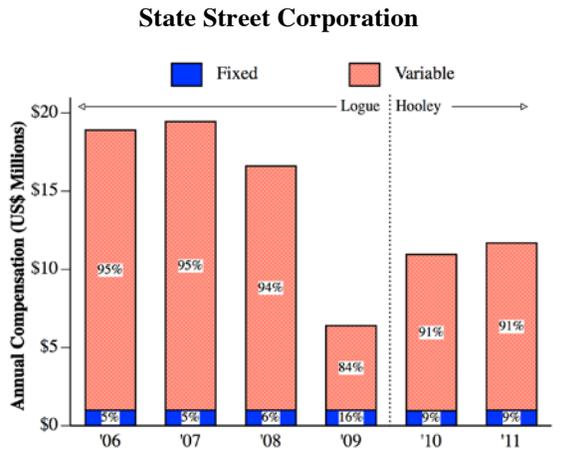
Figure 2 2006-2011 CEO Pay in Global Systemically Important Banks – United States (continued)



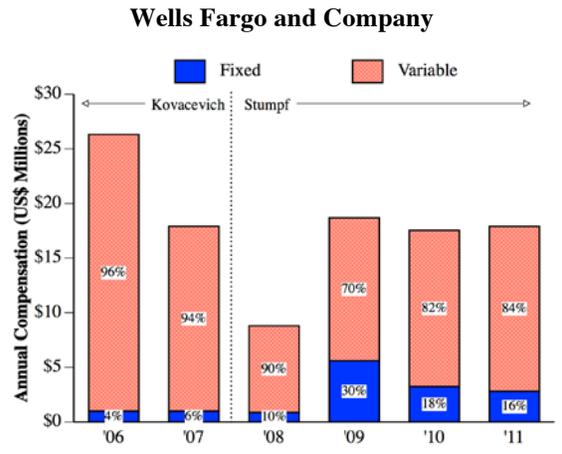
Note: Fixed pay is salary. Variable pay includes cash bonuses and the grant-date value of stock and options received during the fiscal year. Fiscal year 2009 remuneration was restricted under TARP; restrictions lapsed on 17 June 2009.



Note: Fixed pay is salary. Variable pay includes cash bonuses and the grant-date value of stock and options received during the fiscal year. Fiscal year 2009 remuneration was restricted under TARP; restrictions lapsed on 17 June 2009.

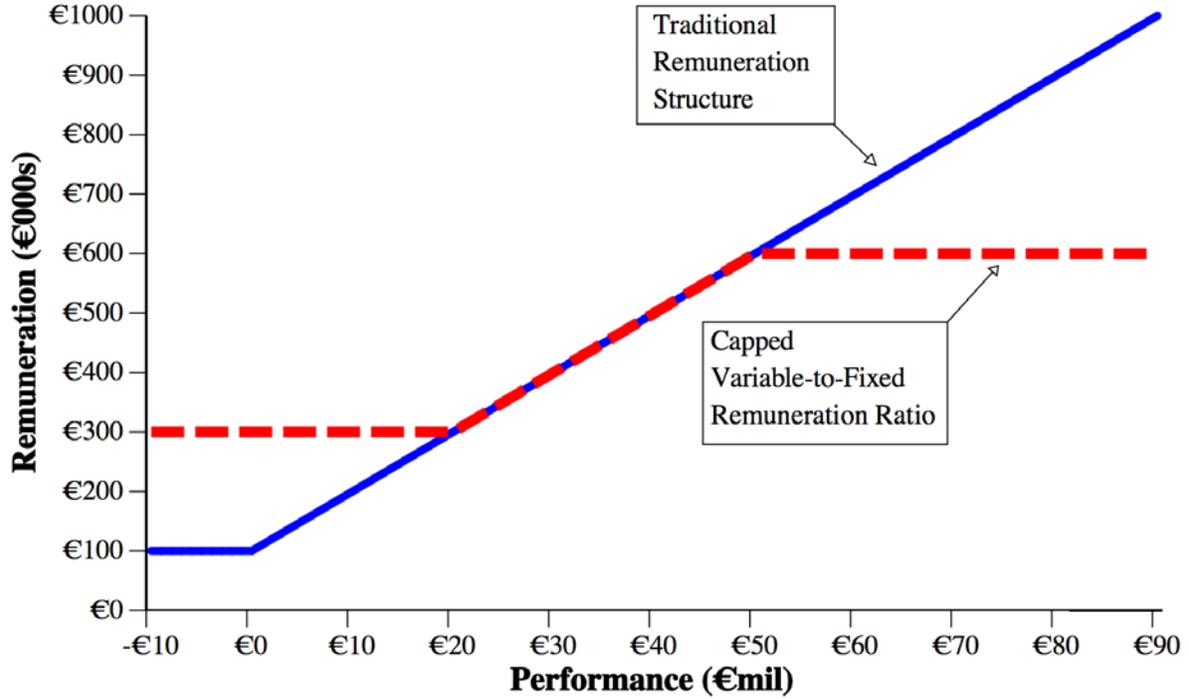


Note: Fixed pay is salary. Variable pay includes cash bonuses and the grant-date value of stock and options received during the fiscal year. Fiscal year 2009 remuneration was restricted under TARP; restrictions lapsed on 17 June 2009.



Note: Fixed pay is salary. Variable pay includes cash bonuses and the grant-date value of stock and options received during the fiscal year. Fiscal year 2009 remuneration was restricted under TARP; restrictions lapsed on 23 December 2009.

Figure 3 Comparison of Traditional and Regulated Bonus Structures



Note: Under the “Traditional Remuneration Structure,” base salary is assumed to be €100,000 and the employee receives 1% of any positive profit. Under the “Capped” remuneration structure, base salary is assumed to be €300,000 and the employee receives 1% of profit above €20 million, with a bonus cap of €300,000.

References

- AFME, 2012, *Performance and remuneration in investment banking: Findings of an industry study by McLagan* (May)
- Aldrick, Philip, 2010, "Brussels backs down on bonus caps for bankers," *Daily Telegraph* (July 1).
- Angelides, Phil, Brooksley Born, Byron Georgiou, Bob Graham, Heather H. Murren, and John W. Thompson, 2011, *The Financial Crisis Inquiry Report* (January 27)
- Blackden, Richard, and Emma Rowley, 2012, "Brussels moves to cap banker bonuses," *Daily Telegraph* (April 13).
- Braithwaite, Tom, Krishna Guha, and Greg Farrell, 2009, "Fed rejects global formula for bonuses," *Financial Times* (October 22).
- "C-bank calls upon Italian banks to stick to managers' pay rules," 2009, (October 29).
- "Call for Dresdner execs to return bonuses get mixed response," 2009, *Banking Newslink* (March 31).
- Canyon, Martin J., Nuno Fernandes, Miguel A. Ferreira, Pedro Matos, and Kevin J. Murphy, 2013, *The Executive Compensation Controversy: A Transatlantic Analysis*, in Tito Boeri, Claudio Lucifora, and Kevin J Murphy, eds.: *Executive Remuneration and Employee Performance-Related Pay: A Transatlantic Perspective* (Oxford University Press).
- Cuomo, Andrew M., 2009, *No Rhyme or Reason: The 'Heads I Win, Tails You Lose' Bank Bonus Culture* (July 30)
- Dale, Samuel, 2012, "EU plan to cap bankers' bonuses under threat," *Money Marketing* (August 30).
- Davies, Lizzy, 2009, "France announces bank bonus crackdown and urges G20 nations to follow suit," *The Guardian* (August 26).
- "European Parliament panel backs cap on bank bonuses," 2012, *Reuters News* (May 14).
- European Union, 2013, *Presidency Flash Note: CRD4/CRR, Results of the Trilogue of 27 February 2013* (February 27)
- "Financial Regulation: Econ Deputies Vote to Slash Bank Bonuses," 2010, *Europolitics* (June 16).
- Freudenheim, Milt, 1993, "Experts see tax curbs on executives' pay as more political than fiscal," *New York Times* (February 12).

- “G20 : Buzek Backs Calls to Limit Bankers’ Pay,” 2009, *Europolitics* (September 10).
- “G-20 Leaders Near Bank-Pay Limits Amid Protests,” 2009, *Associated Press* (September 24).
- “Germany backs calls to limit banker bonuses,” 2009, *Agence France Presse* (August 28).
- Goodman, Peter S., and Gretchen Morgenson, 2008, “By Saying Yes, WaMu Built Empire on Shaky Loans,” *New York Times* (December 27).
- Healy, Paul M., 1985, The Effect of Bonus Schemes on Accounting Decisions, *Journal of Accounting & Economics* 7, 85-112.
- Jagger, Suzy, and Alexandra Freen, 2009, “Sarkozy back-pedals over his demands for worldwide cap on banking bonuses,” *The Times* (September 25).
- Larsen, Peter Thal, 2009, “Rules unlikely to end bonus furore,” *Financial Times* (April 2).
- Moffett, Sebastian, 2009, “France Faces Pressure Over Bonuses As Natixis Sets \$94.6 Million Payout,” *The Wall Street Journal* (March 28).
- Monaghan, Angela, 2009, “Brown sets out plan for bonus clampdown,” *The Daily Telegraph* (September 4).
- Murphy, Kevin J, 2010, Executive Pay Restrictions for TARP Recipients: An Assessment, Congressional Oversight Panel Hearing. <http://ssrn.com/abstract=1698973>
- Murphy, Kevin J., 2009, Congressional Testimony on Compensation Structure and Systemic Risk.
- Murphy, Kevin J., 2011, The Politics of Pay, in Jennifer Hill, and Randall S. Thomas, eds.: *The Research Handbook on Executive Pay* (Edgar Elgar).
- Murphy, Kevin J., 2012a, Executive Compensation: Where we are, and how we got there, in George Constantinides, Milton Harris, and René Stulz, eds.: *Handbook of the Economics of Finance* (forthcoming).
- Murphy, Kevin J., 2012b, Pay, Politics and the Financial Crisis, in Alan Blinder, Andrew Lo, and Robert Solow, eds.: *Economic Lessons from the Financial Crisis* (Russell Sage Foundation, forthcoming).
- Murphy, Kevin J., and Michael C Jensen, 2011, CEO Bonus Plans and How to Fix Them, Harvard Business School NOM Unit Working Paper 12-022; Marshall School of Business Working Paper No. FBE 02-11. Available at SSRN: <http://ssrn.com/abstract=1935654>
- Smith, Geoffrey T., 2009, “Germany’s BaFin Clamps Down On Bank Risk Mgmt, Bonuses,” *Dow Jones International News* (August 14).

Tait, Nikki, 2010, "MEPs seek tougher curbs on bankers' bonuses," *Financial Times* (March 8).

Towers Watson, 2011, *The Impact of European Regulation on Pay in Financial Services*

Turner, Adair, 2010, *After the Crises: Assessing the Costs and Benefits of Financial Liberalisation* (February 15)

"Unicredit: New Salary Regulations Already Implemented," 2009, *ANSA - English Corporate News Service*

Wilson, James, 2009, "German banks set to speed up pay reform," *Financial Times* (December 10).