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REGULATING EXECUTIVE REMUNERATION AT SWISS GLOBAL SYSTEMICALLY IMPORTANT BANKS

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1. Executive summary

On 19 March 2023, facing an acute crisis of confidence, the takeover of Credit Suisse by UBS was announced. This deal was made possible with the support and accompanying measures of the Swiss Federal Council. The deal was legally completed on 12 June 2023.

Following this development, this report addresses three questions in the area of bank CEOs' remuneration. First, how do Swiss regulations on CEO and executive remuneration at Global Systemically Important Banks (G-SIBs) compare with regulations in other developed economies where G-SIBs are incorporated (Germany, other European Union countries, the United Kingdom, and the United States), and is there a case for revising existing regulation? Second, to what extent and in what way do the level or composition of CEO and executive remuneration at Swiss G-SIBs vary from G-SIBs in other key economies? And third, what does the academic literature on CEO remuneration at G-SIBs suggest in terms of risk-taking, survival and performance?

1. *Regulations on CEO remuneration at Swiss G-SIBs vs. other relevant economies:*
    - Regulation of executive pay at SIBs has neither been completed nor harmonised across countries. New regulations, new additions to existing rules, as well as a re-interpretation of existing laws, continue to emerge.
    - Switzerland is the only country among the seven countries/regions investigated that does not have clawback provisions.
2. *CEO remuneration at Swiss G-SIBs vs. other relevant key economies:*
    - From 2016 to 2021, CEO remuneration at Swiss G-SIBs has been a mix of a continental European and a UK/US remuneration approach. Base pay has been more in line with the higher base pay levels at continental EU G-SIBs, while variable pay practices have rather aligned with the higher ratios applied by UK and US G-SIBs. In total, CEO G-SIB remuneration has been higher than at continental and UK G-SIBs, yet lower than at U.S. G-SIBs.
    - From 2016 to 2021, the Remuneration Committee (RemCo, *Vergütungsausschuss*) at Credit Suisse applied relatively inconsistent and unaggressive performance standards for CEO pay which were quite distinct from the standards set by UBS or other G-SIBs.
3. *Link between CEO remuneration and risk-taking, survival and performance*
    - The option to impose clawbacks may serve to strengthen companies' health. However, the interplay between clawback provisions and individual remuneration components

have not yet been fully understood. Introducing clawback provisions may have the unintended consequence of increasing CEO pay. Moreover, clawbacks are difficult to enforce due to numerous legal, economic, accounting, and social barriers and challenges.

- *Deferrals* (the proportion of payment to executives set aside by the company to be paid out at a later point in time) in combination with enhanced monitoring, (1) mitigate misconduct and (2) tend to select for more productive individuals.
- *Bonus caps* may have adverse effects by (1) repelling executive talent towards other jurisdictions or industries, 2) curbing necessary and appropriate levels of risk-taking, and 3) imposing higher fixed costs on banks that may weigh more heavily on banks in times of recession or crisis.
- Swiss *Say-on-Pay laws* are among the strictest worldwide.

Recommendations:

1. *Introduce clawback provisions on executive pay* in the banking industry, but do not overstate the positive effects.
2. Do *not introduce bonus caps*. Bonus caps may have adverse effects.
3. Do *not revise the existing Say-on-Pay laws*. Swiss Say-on-Pay laws are among the strictest worldwide.
4. *Extend the deferral periods*. This can be done by introducing a holding period upon vesting or establishing a longer vesting period for variable pay.
5. Swiss SIBs should *professionalise the Remuneration Committee*. They should increase accountability for executive remuneration and strengthen market-based solutions for managing banks' growth and future crises.
6. The Swiss government should uphold its principles- and proportionality-based approach and *prevent legislative overreach*.

2. Introduction

On Sunday evening 19 March 2023, at a joint press conference of the Federal Department of Finance, the Swiss National Bank, the Financial Market Authority, UBS, and Credit Suisse, it was announced that UBS will take over Credit Suisse. This announcement followed an acute crisis of confidence facing Credit Suisse.

The takeover decision was made against the backdrop of fears of a potentially emerging international banking crisis. On 10 March 2023, the U.S. based Silicon Valley Bank had collapsed, while as of 16 March 2023, depositors had started withdrawing cash from another U.S. based bank, First Republic Bank. The takeover deal was made possible with the support and accompanying measures of the Swiss Federal Council and was legally completed on 12 June 2023. On 11 August 2023, all federal guarantees granted were definitively terminated by UBS, marking the closure of this takeover (EFD, 2023b).

As a result of this deal, the number of Swiss Global Systemically Important Banks (G-SIBs) was reduced from two to one. The presence of one major G-SIB in Switzerland signifies the importance of the Swiss financial services industry worldwide but at the same time may imply potential risks for the Swiss economy.

Since the financial crisis, authorities worldwide have been keenly aware of the possible risks posed by G-SIBs. To contain risks for both the domestic and global economy, all G-SIBS have been subject to special requirements, such as high capital buffers, high loss-absorbing capacity, and high supervisory expectations. The Swiss authorities additionally adopted a series of confidence-building measures, including the introduction of a public liquidity backstop (PLB) for systemically important banks (Federal Council of the Swiss Confederation, 2023b).

After the Credit Suisse take-over, shareholders, bondholders, employees, clients, policy makers and the public have raised numerous questions, e.g., on past investment decisions by the bank, or the structure of the take-over deal. A group of banking stability experts, convened by the Federal Department of Finance (*Eidgenössisches Finanzdeprartement*, EFD), reviewed the takeover of Credit Suisse by UBS and the too-big-to-fail regulatory framework. This group, led by Prof. Yvan Lengwiler (University of Basel), presented its results on 1 September 2023, arguing for more supervisory competencies of the Financial Market Authority (FINMA) (Expert Group on Banking Stability, 2023). A federal parliamentary commission of inquiry (*parlementarische Untersuchskommission*, PUK) is investigating the role of the Swiss federal

council, the EFD, FINMA, and the Swiss National Bank (SNB) and is expected to produce its report in the second half of 2024 (PUK, 2023).

The present expert opinion was produced in the context of the Too-Big-To-Fail (TBTF) report and addresses a set of questions around the level, composition, possible effect, and regulatory aspects of CEO and executive remuneration at G-SIBs (Federal Council of the Swiss Confederation, 2023a).[1] Do Swiss authorities face a level playing field compared to other countries when it comes to regulating CEO and executive remuneration?[2] What are the rules governing the possibility to "claw back" variable pay (e.g. shares or options) in case of malperformance? How does CEO and executive remuneration at Swiss G-SIBs compare with G-SIBs remuneration in other regions and countries? To what extent is CEO and executive remuneration at G-SIBs related to, or possibly even causing, irresponsible risk-taking, lower survival rates, or lower performance?

This report addresses these questions and is structured as follows. Chapter 3 compares and analyses the regulatory settings across Switzerland, the European Union (EU), the United Kingdom (UK), and the United States (U.S.). Chapter 4 compares actual CEO remuneration practices at G-SIBS across the same countries and regions. Chapter 5 evaluates the extant scholarly literature that examined the link between CEO/executive pay (both in the financial services industry and beyond) and various outcomes, such as risk-taking, innovation and financial performance. We explain our method at the end of chapters 3, 4, and 5.

[1] Two other expert opinions in the same TBTF-report context (Ammann, Käfer, & Wiest, 2023; Expert Group on Banking Stability, 2023), while providing significant insights and focusing on other prominent aspects of the TBTF regulatory framework, contained only brief treatments on the topic of executive remuneration given their differing mandates from ours. Ammann and colleagues view regulations on executive remuneration as supplementary tools in the TBTF regulatory framework, and they outlined potential adverse effects of bonus caps on adequate bank risk taking and talent attraction.

[2] The word "compensation" is used more frequently in the U.S, while "remuneration" is more often used by Swiss authorities in line with UK terminology. Swiss and EU companies may use both terms. In this report we use the words "remuneration" and "pay" interchangeably.

Disclaims

The lead author was first contacted by the State Secretariat for International Finance (SIF) of the Federal Department of Finance (EFD) on 12 July 2023, right before the start of the 2023 summer holidays. This restricted the amount of time available to produce this report which was due by the end of September 2023.

The report follows the terms of reference stated by SIF (see appendix) and does not address other critically relevant questions, such as the psychological, organisational, societal, or ethical aspects of executive pay (levels).

While we took great care analysing regulations on remuneration at systematically important banks (chapter 3), neither of the two authors of this report is a lawyer by training.

The lead author personally knows one immediate stakeholder. He has not discussed this report with that person, nor received any information or suggestions from that or other stakeholders.

Neither co-author has been involved with the Credit Suisse-financed Center for Financial Services Innovation at the University of St.Gallen.

3. Regulating executive remuneration at systematically important banks

At the height of the financial crisis, in 2009, there was widespread agreement among leaders at the G20 Pittsburgh Summit: "Excessive compensation in the financial sector has both reflected and encouraged excessive risk taking." "Today we agreed … to make sure our regulatory system for banks and other financial firms reins in the excesses that led to the crisis" (G20 Information Centre, 2011).

In the years that followed, leading economies step by step adopted rules and regulations to restrain excessive risk-taking at systematically important banks motivated by executive remuneration incentives.[3] In this chapter, we compare and evaluate the regulatory system in seven economies/regulatory areas.[4]

This chapter is organised as follows. First, we list and compare the extant regulations on executive remuneration at G-SIBs in seven countries or regions and identify the underlying motives and distinct patterns. Second, we examine the meaning and difference between malus and clawbacks, in view of widespread confusion about these two terms. Third, we draw conclusions on the patterns and trends observed.

Comparing regulations on remuneration at systematically important banks (SIBs)

This section lists and reviews regulations in seven countries or areas, i.e. Switzerland (CH), United Kingdom (UK), United States (U.S.), Hong Kong (HK), Singapore (SG), European Union (EU), Germany (DE). We refer to original documents, where possible, and zoom in on variable remuneration at banks, particularly at systematically important banks (SIBs).

We examine three aspects of possible regulation: (1) the cap on variable pay as a ratio of fixed pay (bonus cap), (2) the deferral period and percentage of variable pay affected, and (3) clawback provisions.

Table 1 summarises the regulations in place in the seven countries/areas.

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[3] The G20 leaders' statement called for "reforming compensation practices to support financial stability", with "full endorsement" to the Implementation Standards of The Financial Stability Board (FSB). The FSB already issued Principles for Sound Compensation Practices in April 2009, and followed this call to issue the Implementation Standards. Together they formed the Principles and Standards (P&S) that witnessed wide adoption in major countries.

[4] We will use terms such as areas, nations, countries, or jurisdictions to best refer to the relevant entity. For instance, Germany has adopted domestic rules but is also subject to EU regulations. The UK, a former EU member, still has to comply with certain EU rules. Hong Kong has separate regulation but is not a separate country.

Table 1. Overview of regulations (existing and proposed)

Area	Regulation short name[5]	Nature	Target groups	Variable Pay regulation			Variable pay instrument*
				Cap	Deferral: time and proportion	Malus /Clawback provisions	
EU	CRD V, 2019**	Regulation	TMTs, MRTs	100%, up to 200%	4yr40. high60	Firms should set specific criteria: up to 100% of total variable pay shall be subject to *malus* ***or*** *clawbacks*.	Min50
			SIBs		TMTs: 5yr40. High60		
			ETA	Exempted			
UK	PRA and FCA Remuneration Codes, 2023	Regulation	All employees	100%, up to 200%	4yr40. high60	Not High-paid MRTs: 6yr for **deferred** variable pay upon awarded High-paid MRTs: 7yr for **all** variable pay upon awarded	Min50
			SIBs	100%, up to 200%	TMTs: 7yr60		
DE	Remuneration Regulation for Institutions, 2023	Regulation	All employees	100%, up to 200%	TMT+: 5yr60. MRTs: 4yr40. High60	2yr for **all** variable pay upon expiry of deferral period	Min50
CH	Remuneration Schemes, 2016	Regulation	SIBs	NA	3yr with a significant percentage	Only Malus on **deferred** variable pay.	NA
HK	CG-5, 2021	Principles	TMTs, MRTs, RCs	NA	3yr	Should be in place for **all** variable pay.	Min50
SG***	MAS Notice 637, 2022	Principles	TMTs, MRTs, RCs	NA	3yr	Should be in place for **all** variable pay.	NA
U.S.	DFA 954, adopted 2022	Principles	Listed firms	NA	NA	In cases of material financial re-statements.	NA
U.S.	*DFA 956, 2016* ***Proposed***	*Principles*	*Listed firms*	*Implicit cap on options*	*4yr40%, up to 7yr60%*	*Clawbacks on* ***all*** *variable pay, for 7 years upon vesting*	*Max15options*

* In the right-most column: Min50 means minimum 50% by share-linked instruments. Max15options means maximum 15% of options in deferred variable pay

** CRD VI, 2021 has recently reached final consensus in the negotiations among the Commission, the Parliament, and the Council of the EU. See the relevant section in the main text for more detailed discussions.

*** SG deferral 3 year is indicated by the FSB report (Financial Stability Board, 2021), but we could not find in the relevant sections or use keyword searches in the series of MAS Notice 637 or SG's Banking Act 1970.

Notes on shorthands:

Variable pay: deferrals are denoted in shorthands. For instance, "3yr40" means at least 40% are deferred by at least 3years. "high60" means at least 60% for high amount, typically EUR/GBP 500K. "TMT60" means at least 60% deferred for TMTs. This table attempts mainly to lay out the minimum as set out by the regulations or supervisory guidelines:

1. TMTs: Top Management Teams. TMT+: TMT and one-level below.
2. MRTs: Material Risk Takers. RCs: Risk Controllers.
3. SIB: Systemically Important Banks.
4. ETA: Exempt threshold applicable. That is, small banks by assets, variable pay by amount threshold or proportion threshold.

[5] For technical readers interested in the directly relevant articles and sections on variable pay of the regulations and principles, Table A1 in the appendix maps the contents from the 5th column to the right-most column in this table.

We make six observations. First, a wave of principles, rules, and regulations has followed from the consensus signalled by the world leaders at the 2009 G20 Summit. These regulatory efforts all aim to mitigate excessive risk-taking in the financial industry through curbing excessive remuneration.

Second, the *nature of rules and regulations* is influenced by the legal origins of either *common law or civil law*. Countries with a common law system rather resort to setting principles and standards, whereas civil law countries have drafted specific regulations. The exception is the UK due to its former EU membership.

Third, there is a *variety of national practices on deferral periods and the proportion of variable pay subject to deferral periods*. Deferred remuneration is the proportion of payment to executives set aside by the company to be paid out at a later point in time. Deferred remuneration typically helps firms retain executives (Gopalan, Huang and Maharjan, 2021).

The U.S. has neither set minimum deferral periods nor percentages. By contrast, the EU and the UK have set a minimum of four years for a significant percentage of deferred variable pay. Once set, rules have continued to evolve in each of these jurisdictions. Examples include the pending U.S. adoption of a mandatory deferral, and the UK's rejection of the CRD's blanket bonus cap in 2016 (see discussions below). In addition to the continued focus on G-SIBs, more considerations have been taken regarding smaller and domestic banks, as well as other financial institutions including insurance companies and asset managers.

Fourth, *Switzerland is the only country* (in this group) that does *not have clawback provisions on variable remuneration that has vested and been paid out* for any type of variable pay at any category of SIBs as of 2023. It is perhaps not so problematic that Switzerland does not have clawback provisions for domestic systemically important banks (D-SIBs) that "primarily have a domestic focus" (FINMA, n.d.). However, it is certainly notable that Switzerland does not have clawback provisions for variable executive pay at global systemically important banks (G-SIBs) that after all have "extensive international reach" (FINMA, n.d.) and that in many respects are therefore subject to stricter regulatory and supervisory requirements.

There is one exception to the conclusion that Switzerland does not have clawback provisions. This is the case when a bank received state aid pursuant to Article 10a of the *Bankengesetz (BankG)* (Swiss Confederation, 2023).[6] However, as of 2023, this law is only applicable

[6] The full name of the *Bankengesetz* (Swiss Banking Act) is, as in the referenced source, *Bundesgesetz über die Banken und Sparkassen (Bankengesetz), 8. November 1934 (as of 1 January 2023).*

before paid out and does not specify recouping variable remuneration that has already been paid out (Federal Department of Finance of the Swiss Confederation, 2023a). Below we explain the different stages of variable pay in the section "Malus and clawbacks provisions".

Fifth, *bonus caps have only been introduced in some countries/areas*. The EU and the UK have introduced bonus caps.[7] However, after Brexit the UK refused to implement a blanket application of the cap as required in CRD IV and granted exception to non-large banks in 2016 (Prudential Regulation Authority and Financial Conduct Authority [UK], 2016).

In the US, instead of bonus caps, the proposed Dodd–Frank Act (DFA) Section 956 includes an implicit cap on using stock options.[8] U.S. financial institutions have opposed Section 956 and this proposal has not yet been formally approved, nor is it clear if or when it will be.[9] We nevertheless include this *proposed* regulation at the bottom of the table because it is not uncommon that firms voluntarily adopt rules or regulations, anticipating they will eventually pass. This has also been the case for DFA Section 954 (on executive remuneration clawback rules) which was enacted into law in October 2022 (see later in this chapter).

Sixth, *new regulations continue to be drafted* in response to the sometimes lively national debates on executive pay. These will be detailed in the next section.

Recent development in regulating executive remuneration

In most advanced economies, regulators continue to issue new rules and regulations in the field of executive remuneration at SIBs. Below, we discuss four noteworthy developments in the US, the UK, the EU, Switzerland.

As mentioned above, in October 2022 the U.S. SEC adopted Section 954 of Dodd-Frank Act that focuses on the recovery of executive compensation, or clawback provisions. The SEC final rule (SEC, 2022) will require listed firms to include clawback provisions in cases of

[7] The limit on variable remuneration has echoes from the leaders' statement of the G20 summit that curated global policy responses. Yet the cap in the statement is to cap as a percentage on the firm level, with a qualifier as to the firm's maintain capital base. While implementation and understanding can go further and change, taking a firm-wide approach both aids the ultimate purpose and leaves more leeway to the firm for designing pay packages. The former is more straightforward to quantify and more convenient to disclose by a period-end summary of the cash paid and awards granted. This potentially explains the reporting schema of group-focused compensation in Germany and Switzerland, despite that there is further cap on individual earners in Germany.

[8] This implicit option cap differs from a general bonus cap in that the former only concerns a specific type of variable pay instrument (stock options), whereas the latter concerns all elements of variable pay.

[9] In the 1980s, options were considered as a superior remuneration instrument compared to shares that had no incentive effect and were immediately tradable if no deferrals were in place. The 2016 proposal form of DFA Section 956 states that options can only be used up to 15% of total variable pay were such instruments to be included in deferred compensation (SEC, 2016).

financial misstatements. This final rule included both material misstatements ("Big R") as in the 2015 proposal, plus restatements that correct errors which would only materialize if left uncorrected ("little r").[10] The motivation has been to deter opportunistic behaviour rather than an actual expectation of frequent clawbacks due to "little r" (Ho, 2022).

On December 19, 2022, UK's regulatory authorities PRA and FCA initiated a joint consultation to remove the bonus cap that resulted from CRD implementation (PRA and FCA, 2023a). Subsequently, on October 24, 2023, PRA and FCA reached the final decision to remove the bonus cap, effective from October 31, 2023. The UK authorities stated that "*a bonus cap is not routinely imposed in other leading international financial centres outside the EU. The bonus cap has been identified as a factor in limiting labour mobility. The final policy facilitates this objective by removing this barrier in the UK*" (PRA and FCA, 2023b, paragraph 1.17).[11]

In addition, on May 12, 2023, the FCA sought to enhance proportionality by relaxing the exempt threshold for remuneration rules and further exempt smaller banks from malus and clawback provisions (FCA, 2023). The consultation process closed on June 9, 2023.

On July 7, 2023, the EU announced a final agreement on CRD VI, the successor regulation to CRD V (Council of the European Union, 2023b). In CRD VI, no changes concerning the regulations as laid out in Table 1 for the EU have been planned. CRD VI will include a harmonised "Fit and Proper" framework on assessing the suitability of bank executives and supervisory body members. The European Parliament (EP) has sought to amend Article 94: Variable elements of remuneration of CRD V (trilogue initial positions, paragraph 828b) by demanding that variable remuneration should be assessed based on the performance of the individual manager, the unit, and the whole bank. Further, the EP demands that financial and non-financial criteria should be used for such assessment. Finally, the EP sought to amend Article 74 - Internal governance and recovery and resolution plans (Paragraph 667) by requiring remuneration policies to consider ESG risks. The Council probably agreed to this, judging from the Presidency Debriefing on the outcome (Council of the European Union,

[10] The terms, Big R and little r, both refer to financial re-statements. The former is capitalised because of its materiality.

[11] In the wake of the UK policy turn to remove the bonus cap, heads of two EU G-SIBs - Ana Botín, executive chair of Santander, and Christian Sewing, CEO of Deutsche Bank - openly argued that EU regulators should follow the UK's lead to move away from bonus caps (Financial Times, 2023b; 2023c). These efforts suggest a concerted campaign against bonus caps at EU banks. In contrast, the Swiss D-SIB *Zürcher Kantonalbank* (ZKB) announced to cap its bonus in 2023 to the 2022 levels and to reduce the proportion of variable pay in favour of fixed pay. ZKB is planning to introduce a new remuneration model as of 2024. ZKB's head of HR indicated that in this way ZKB responded to social and political debates around bank remuneration (SRF, 2023).

2023b). It is not clear at the time of writing if the first two proposed revisions to CRD VI will be successful (Council of the European Union, 2023a).

On September 6, 2023, the Swiss Federal Council submitted a bill to parliament to introduce the public liquidity backstop (PLB) for SIBs (both G-SIBs and D-SIBs). The bill explicitly allows for reclaiming variable remuneration that has been paid out in case of state aid. (Federal Council of the Swiss Confederation, 2023).[12]

Malus and clawbacks provisions

As implied in Table 1, some regulators use the terms malus and clawbacks interchangeably. This is partly based on a distinctive understanding of property rights across jurisdictions. In some jurisdictions adjusting a deferred remuneration component is less problematic because this component is not yet formally owned by the executive. In other countries, doing so may meet with significant legal hurdles involving individual rights.

One may think about the differences between malus and clawbacks in the following step-by-step way of issuing and accounting variable pay and transferring ownership rights. At stage 1 a malus may apply; at stage 2 a mix of malus and clawbacks may apply depending on the jurisdiction's property rights; at stages 3 and 4 clawbacks may apply.[13]

1. *Variable pay unawarded and unvested*. The company has set up its remuneration system, including a variable pay component. No variable pay has been issued and no expenses have been accounted. No need for clawback provisions; malus provisions (i.e. additional hurdles to the vesting of the variable incentive award) may apply.
2. *Variable pay awarded but unvested*. The company has awarded variable pay to an executive, but the variable pay has not yet vested, i.e. the ownership right (e.g. to purchase the company's stock) has not yet fully transferred to the executive. However, the company has put the expenses in its accounts. Either malus or clawback provisions may apply, depending on the jurisdiction's property rights specifications.
3. *Variable pay awarded and vested*, but funds have not yet been paid out. The company is planning to transfer the shares to the executive, or ready to let the executive exercise

[12] The changes to the BankG with background and rationale are detailed in https://www.newsd.admin.ch/newsd/message/attachments/82424.pdf (German version only, accessed 13 October, 2023).

[13] Our 4-stage distinction is similar to US SEC's discussion on how to define when LTIP is received (SEC, 2015, p. 53-55). SEC defines a LTIP to be received before vesting, i.e. our stage 2.

the right to purchase the company's stock. At this point the property or entitlement rights have completely transferred to the executive, and clawback provisions may apply.

4. *Variable pay awarded and vested*, and *funds have been paid out*. The company has paid out the amounts and the executive has the funds under full control. Clawback provisions may apply. Recouping funds may be a challenge.[14]

The stages above and seemingly technical distinctions are important as even within the same bank, different standards or regulatory requirements may apply. We will discuss an example in chapter 4.

Table 2 builds on these four stages and illustrates the differences between jurisdictions.

Table 2. Clawback provision overview: regulations in conjunction with accounting

Area	Reg Short Name	Malus	Malus/Clawbacks	Clawbacks	
		Unawarded and unvested	Awarded but unvested	Awarded and vested	Funds paid out
EU	CRD V	Applicable			
UK	SYSC 19D	Applicable			
DE	InstitutsVergV	Applicable			
CH	FINMA Circ. 2010/1	Applicable		Not applicable	
US	DFA, 954	Not applicable	Applicable		
US	DFA 956, ***Proposed***	*Applicable*			
HK	CG-5	Applicable			
SG	MAS Notice 637	Applicable			

Say on Pay (SoP) laws

Above, we focused on rules and laws directly regulating the structure and conditions of executive remuneration at SIBs. In addition, other rules and laws may also impact executive remuneration at SIBs directly or indirectly. Among the most important are so-called Say-on-

[14] We draw an analogy to having funds deposited in a bank account compared to holding cash funds. Stage 3 is akin to an individual having funds in the bank account while stage 4 is similar to the individual having withdrawn the cash from the bank account. While both ways of owing the funds are identical in terms of the individual's entitlement or property rights, it is easier for authorities or banks to freeze or seize assets held in a bank account compared to a situation where the individual holds the funds in cash.

Pay (SoP) laws. SoP laws are typically part of domestic corporate law and require companies to let shareholders vote on executive remuneration at the annual general shareholder meeting (AGM). Most countries/regions have adopted SoP laws. Hong Kong and Singapore are an exception and do not have SoP laws (Ang, 2020). SoP laws may vary along three dimensions. We first discuss the two dimensions, followed by an attempt to categorise countries hosting G-SIBs by the features of SoP laws.

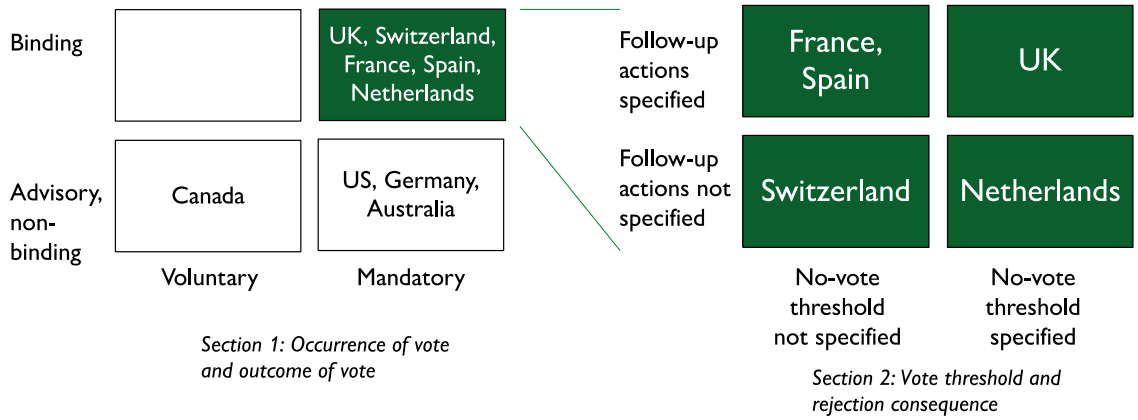
The first dimension is whether votes at the AGM are binding or non-binding, in other words if the SoP law requires companies to act upon rejection of a remuneration proposal or not. There is a substantial variation across countries and regions. For instance, the U.S. SEC introduced a mandatory and *advisory* SoP in 2011 (SEC, 2011) while Switzerland, after the successful Swiss executive pay initiative of 2013 (*Minder Initiative*), introduced a mandatory and *binding* SoP effective since 2014 through the Ordinance against Excessive Compensation in Listed Companies (Federal Office of Justice of the Swiss Confederation, 2014). The Federal Ordinance against Excessive Compensation in Public Corporations was adopted into federal law taking effect from 1 January 2023 (Federal Office of Justice of the Swiss Confederation, 2022).

A second dimension by which SoP laws may vary are the implications for companies of a no-vote. Let's compare Australia, which introduced a mandatory and advisory SoP law in 2011, and the UK, which changed its SoP law into a binding one in 2013. The Australian SoP law (1) has a 25% threshold on 'no' votes cast at the AGM and (2) uses a "two-strike" rule. This means that the company does not need to act immediately on a first rejection but must explain its response in the *next* remuneration report. A second consecutive rejection means the board of directors faces a re-election (Parliament of Australia, 2022). By contrast, the UK set a passing threshold of 50% on votes cast at an AGM (Greene and Gottlieb, 2012), and requires companies to (1) devise a new remuneration policy immediately and (2) stick to the old one until the new policy has been approved by the shareholders (Thomas and van der Elst, 2015, p. 668-671).

For the sake of clarity, Switzerland's mandatory and binding SoP law is different from both Australia and the UK. While the latter two countries imposed a no-vote threshold, Switzerland has left discretion to the company (for a tailor-made SoP) in deciding on the details of the voting and on subsequent actions following a no-vote (Schoch and Sieber, 2014). In other words: no no-vote threshold and no specifications of follow-up actions.

Figure 1 shows our attempt to categorise SoP laws focusing on the countries of interest among the several main features outlined from the above.[15] We follow the principles of the two axes representing more stringent requirements, moving from left to right, and from bottom to top.

Figure 1. Categorising SoP laws: countries hosting G-SIBs



The left-hand side (Section 1) of figure 1 categorises countries by (1) whether a vote at the AGM is mandatory or not, and (2) whether the voting outcome is binding or not.[16] The right-hand side (Section 2) zooms into SoP laws that are mandatory and binding.[17] Here we position countries by whether the SoP law has (1) specified a threshold for a proposal to be approved or rejected,[18] and (2) specified follow-up actions[19] required to be taken by the company in cases of a failed proposal. Figure 1 illustrates the great variety of SoP regimes across European countries hosting G-SIBs.

A third source of variation of SoP laws follows from the European Union's recent Shareholder Rights Directive (SRD II) which at its current state envisages "*minimum harmonisation*" (ESMA & EBA, 2023, p. 36). The SRD II purpose is to grant shareholder voting rights on remuneration policy and the remuneration report (The European Parliament and the Council of the European Union, 2017, Article 9a and Article 9b). Its minimum harmonisation allows

[15] Our sources of SoP law features also include, in addition to the references discussed so far, the proxy advisor Glass Lewis's relevant country-specific guidelines (Glass Lewis, 2023b) and Thomson Reuters Practical Law database.

[16] While the top-left part of Section 1 is empty for our main countries of interest, we conjecture that it is not likely for a country to have an SoP law that is voluntary but binding.

[17] The same further categorisation can apply to other subsection of Section 1, e.g. mandatory and advisory. There could be critical consequences for rejection of pay-related proposals in these other SoP regimes and Australia is one such example.

[18] Proxy advisors typically consider a no-vote threshold of 20% to be significant and thus imperative for actions (Glass Lewis, 2023a, p. 28).

[19] We apply a very broad concept of follow-up actions specified by the SoP law, for vote on pay policy or pay report or both; follow-up actions may range from an explanation without any actions to a total forfeiture of executive pay.

member states degrees of freedom to transpose and implement the directive in national laws. For example, France has a mandatory and binding SoP law (AMF, 2017), while Germany enacted an optional and advisory SoP law in 2009 (Vesper-Gräske, 2013, p. 774-778). Indeed, Germany abandoned its initiative to enact a mandatory and binding SoP law in 2013 following the Swiss precedent (Brems, Hafemann, Witt, and Begiebing, 2016, p. 114). Only following the SRD II did Germany change its SoP law into a mandatory but advisory vote (Glass Lewis, 2023a).

Finally, for the sake of completeness, we point out that many countries also adopted laws or programmes on bank recovery and resolution (typically Banking Acts). We already referred to the *Bankengesetz* (BankG) in Switzerland. All seven countries/areas that we examined have such laws containing articles that grant extraordinary powers to supervisory bodies including a change of management and change of remuneration policies, typically in emergency situations such as G-SIB prospective insolvency.

Method

In chapter 3 we provided an overview of existing rules and regulations in Switzerland and other relevant economies. First, we searched with an array of keywords identified from our own knowledge pools and literature, for instance, remuneration regulations, bank regulations. Second, we downloaded and studied the relevant regulatory documents and materials to identify the relevant legal articles, clauses, provisions, or guidelines as well as the mentioning of such legal articles. Third, with the addition of new keywords identified from the reading of the downloaded documents, we repeated the first and second steps to collect more regulatory documents, especially those that we missed out in a previous round. For instance, new keywords included the names of regulatory documents such as PRA and FCA Remuneration Codes, FINMA Circular 2010/1 Remuneration Schemes. Fourth, we compared the legal articles across the jurisdiction, identified the key components of interest, and harmonised the wordings regarding the key components to put them into the same table for comparison. Upon repetition of the above steps, we finalised the tables and discussed our findings.

4. Remuneration practices at systemically important banks

In this chapter, we compare the actual CEO remuneration practices at G-SIBS across the same seven countries and regions investigated in the previous chapter. We evaluate the various remuneration components and identify how CEO remuneration at Swiss G-SIBs differs from these other economies. For the sake of a broad readership, we keep the text as non-technical as possible. We conclude the chapter with some technical notes comparing CEO pay at UBS and Credit Suisse, esp. on the link between CEO performance and bank solvency, and how remuneration at Swiss G-SIBs may be affected by regulations from other jurisdictions.

Table 3 shows the summary statistics of the CEO (or executive chair; see methods notes at the end of this chapter) remuneration in Switzerland, the UK, the EU, and the U.S. (There are no G-SIBs with their head office in Hong Kong and Singapore.) For each country/region, we distinguish between (1) base salary; (2) cash bonus; (3) long-term incentive plan (maximum value)[20]; (4) cash pay [the sum of (1) and (2)]; (5) variable pay [the sum of (2) and (3)]; and (6) total pay [the sum of (1), (2) and (3)]. To assess not just overall levels but also the dispersion, we report the 25th, median and 75th percentile for each country/region and pay category.

[20] By setting a maximum value for performance-based pay, companies have set a de facto cap on variable pay. For instance, Credit Suisse stated explicitly that the variable pay for its CEO was capped at four times of the fixed base salary (Credit Suisse Group AG, 2021, p. 256). To put this into perspective of our table, this would translate to a maximum of 80% variable pay over total pay. This escalates, however, as exemplified by a ratio of 95% being 19 times the fixed pay due to non-linearity.

Table 3. CEO or executive chair[21] remuneration summary statistics: 2016 to 2021

Panel A: Switzerland and the UK								
	CH: 2 G-SIBs					UK: 3 G-SIBs		
	25th	median	75th			25th	median	75th
Variables, values in thousands of US dollars								
[1] Salary	**2573**	**2952**	**3005**		salary	**1486**	**1737**	**3119**
[2] Cash Bonus	1934	2053	2938		bonus	1108	1618	2115
[3] Long term incentive plan (LTIP): maximum value	4022	6941	8732		LTIP value	3870	4878	6364
Variables, constructed by summing the above								
[4] Cash pay (sum of [1] and [2])	4579	4618	6011		Cash pay	3289	3857	4553
[5] Variable Pay (sum of [2] and [3])	6919	9319	10371		Variable pay	3848	6064	8557
[6] Total Pay (sum of [1] to [3])	**10007**	**12060**	**12892**		Total pay	**5466**	**9069**	**10553**
Ratios, in percentage points								
[7] Cash bonus ratio ([2] divided by [4])	41.6	44.4	48.6		bonus ratio	31.5	40.0	56.5
[8] LTIP ratio ([3] divided by [6])	37.4	55.5	65.5		LTIP ratio	48.0	56.0	59.0
[9] Variable pay ratio ([5] divided by [6])	**69.4**	**75.6**	**80.4**		Variable pay ratio	**64.1**	**73.0**	**80.2**
Panel B: the EU and the US								
	EU: 4 G-SIBs					US: 8 G-SIBs		
	25th	median	75th			25th	median	75th
[1] Salary	**1678**	**2352**	**3793**		salary	**1250**	**1500**	**1500**
[2] Cash Bonus	348	1408	2031		bonus	5000	5350	6781
[3] LTIP value	1506	3430	4178		LTIP value	11704	17040	27466
[4] Cash pay	2843	3750	4229		Cash pay	1438	3999	6885
[5] Variable Pay	**1756**	**2755**	**3818**		Variable pay	**14409**	**19996**	**31060**
[6] Total Pay	**3781**	**4598**	**7611**		Total pay	**16200**	**21246**	**32560**
[7] Cash bonus ratio	18.0	42.0	46.0		bonus ratio	76.8	78.0	82.2
[8] LTIP ratio	43.0	50.0	55.5		LTIP ratio	76.0	86.0	92.0
[9] Variable pay ratio	**47.4**	**52.2**	**64.5**		Variable pay ratio	**91.0**	**93.5**	**95.4**

Notes regarding the above table:
1) Table columns: 25th, and 75th are the percentiles, median is the 50th percentile.
2) The computation should not be done by directly applying a row above to a row below because, for instance, a CEO with a median salary might not have a median variable pay.

[21] See methodology note at the end of this chapter.

First, we discuss the two main components, fixed and variable pay, and then we look at the total pay. We focus on the 25th quartile to the 75th quartile because the extreme ends of the data, despite our best attempt at handling outliers, are subject either to transitional periods of succession or potential erroneous treatments at the data sourcing, which could lead to misrepresentation.

Base salary is the only component of *fixed pay* we use here. (We do not include pension benefits mainly because they are funds that executives cannot use until retirement.[22]) From 2016-2021, Swiss G-SIBs paid the highest CEO salary by median, yet it was the EU that led in fixed pay by 75th percentile. U.S. G-SIBs typically paid a much lower base salary to the CEO compared to European counterparts, ranking consistently the lowest in all 3 quartiles.

By contrast, U.S. G-SIBs led in terms of the CEO *variable pay* ratio over this period, with a whooping consistency of over 90% from 25th percentile, whereas the EU was at the far bottom below 50%. These strong differences between EU and the U.S. CEO pay practices reflect the regulations laid out in Table 1. The EU regulator aims for pay packages with a higher fixed component and a balance between fixed and variable remuneration, while U.S. regulators allow G-SIBS to rely almost exclusively on variable or performance pay. The ratio of variable vs. fixed pay at UK G-SIBs, despite the UK's former EU membership and the UK still having to comply with EU regulations, was quite different from EU G-SIBS and instead more like Swiss G-SIBs.[23]

Looking at *total CEO remuneration*, U.S. G-SIBs were far ahead of all other countries/areas. For instance, its 25th percentile is more than double that of EU's 75th percentile. EU G-SIBs were paying the lowest total CEO remuneration of the examined countries/regions and had a relatively balanced ratio of fixed and variable pay. CEO total remuneration at UK G-SIBs, despite the EU regulatory roots, was quite distinct from other EU banks. Swiss G-SIBs, not tied to CRD influences, adopted a mixed approach by aligning their base pay more with continental EU G-SIBs, and their variable pay practices rather with UK and the U.S. G-SIBs.

While comparing CEO remuneration at G-SIBs, critical determinants have not been analysed in depth in this report. For instance, bank size may impact CEO pay. Also, banks' portfolios

[22] We acknowledge that this omission might represent a substantial amount in absolute values. However, pension benefits typically do not constitute a substantially large portion of fixed/variable/total pay, especially for the highest earners. In contrast, base salary can proxy fixed pay because it is an important benchmark in practice to determine pension benefits and variable pay caps.

[23] Again, we note that the data presented here is most meaningful to compare and analyse variation rather than absolute numbers. In particular, the fact that variable pay ratios exceed the bonus caps applied in the EU and the UK is most likely due to data representation, most notably through 1) the use of maximum rather than target value of LTIP and 2) the inclusion of only the most representative elements rather than all pay data.

vary which will reflect different risk profiles leading to different incentive structures. U.S. G-SIBs are on average larger than G-SIBs based in other countries/regions we investigated, and more exposed to investment banking, where variable pay plays a larger role. By contrast, European G-SIBs are on average smaller and less active in investment banking.[24]

Some technical notes on UBS and Credit Suisse

The discussion above offers an international comparison of the link between remuneration regulations and the CEO's actual remuneration packages at the end of the year. There are many aspects and factors underlying the pay outcome. A case in point is that long term performance-based remuneration may be based on the bank's financial health, for instance the common equity tier 1 (CET1) ratio for the two Swiss G-SIBs for their variable pay. The performance pay elements could be the CET1 ratio itself or other directly related measures that are based upon CET1 ratio, for instance, CET1 leverage ratio or return on CET1 ratio. We provide examples below and discuss their implications.

As an example, in 2019 UBS laid down its first LTIP for executives that comprised 50% of variable pay at maximum, where return on CET1 capital had a performance weight of 50%, while the other 50% was based on total shareholder return benchmarking with G-SIB peer companies (UBS Group AG, 2019, p. 21).

By contrast, Credit Suisse in 2019 provided a LTIP of about 58% (at maximum), where each of the three elements had equal performance weight: return on total equity, tangible book value per share, and relative total shareholder return (RTSR). Its peer group had remained unchanged since 2016 consisting of "18 publicly-listed companies, chosen by the Compensation Committee based on size, geographic scope, business mix, and positive share price correlation in terms of reaction to external market conditions" (Credit Suisse Group AG, 2019, p. 252). This was a notable difference with UBS.

Moreover, there are indications of significant within-company variation even for the same executives. For instance, Credit Suisse's LTIP 2017 for CEO and divisional and functional heads contained a CET1 ratio (5% weighting) and a CET1 leverage ratio (5% weighting),

[24] For bank size we take the average of total assets for US and European G-SIBs, respectively, using data in 2022 from an S&P report by Khan, Terris Meggeson, and Taqi (2023). For investment banking activities, we look at the top 10 banks in 2022 from Financial Times (2023)' League Tables. Top 5 Investment banks are all US G-SIBs and the sum of top 2 is more than the that of top 6 to 10, where rank 8 is also US but rank 9 is neither US nor European.

whereas the RTSR assumed a 50% weight (Credit Suisse Group AG, 2019, p. 231). In Credit Suisse's 2019 LTIP, no CET1 ratio or directly related measures was included at all.

The Credit Suisse case shows substantial variation of LTIP evaluation criteria over the years. The lack of consistency and the unaggressive performance standards for CEO pay were very different from the standards set at UBS or other G-SIBs. This leads to two types of conclusions. First, the *remuneration committee* (RemCo, or in German: *Vergütungsausschuss*) at Credit Suisse would appear to have been quite erratic over a longer period. Second, the RemCo proposals were approved by shareholders in the period when Switzerland had enacted a mandatory and binding SoP law (after 2014) (Schoch and Sieber, 2014).

Finally, we refer to our discussion in Chapter 3 showing the variation in regulatory requirements across jurisdictions. This variation has key implications for multinational banks. All G-SIBs are operating in different legal contexts. While a parent company in an area with the most stringent regulations typically applies that standard to its subsidiary, the picture is different for the reverse situation. A G-SIB domiciled in an area with less stringent regulations (e.g. Switzerland) will hold its executives to the local standard, yet its subsidiaries in other countries or areas may face tougher regulations. For instance, as Credit Suisse explained in 2022, its parent company executives were not subject to clawback, but its MRT employees in the UK and its EU employees *were* subject to clawback provisions (Credit Suisse Group AG, 2022, p. 251). This within-company variation on clawback provisions had been in place since 2015 after UK's PRA mandated clawback provisions (Credit Suisse Group AG, 2014, p. 200 and p. 203). [25] Such within-company variation also pertains to other aspects where regulatory requires differ, such as deferral horizons and percentages.

[25] There was also a major change in the wording of the bank's report about malus and clawbacks. In 2013, its performance share awards were "subject to explicit performance-based *clawback* provisions" (Credit Suisse, 2013, p.182). In 2014 this changed to more modest "*malus* provisions" (Credit Suisse, 2014, p. 205).

Method

We choose the BoardEx database as our main database from some of the most prominent ones including Execucomp and Capital IQ's People' Intelligence because of its scope and data comparability for our purposes. We manually supplemented the CEO data by company annual reports for both Swiss G-SIBs, i.e. UBS and Credit Suisse.

We collected data on the *highest paid individual*. This is almost always the CEO. However, there are exceptions to this rule: some banks have an executive chair who may receive a higher remuneration than the CEO (e.g. at Banco Santander). For our analysis we relied on the disclosure rules and limitations in the same seven countries/regions that are the focus of this report. For instance, Swiss G-SIBs only publish data of the CEO and the highest paid individual (typically the same individual) and of the total executive team. Analysing total executive team remuneration is complicated by the fact that US and UK banks have quite different executive committee structures compared to their continental European counterparts.

Our choice of database has the implication that we most likely *overstate* total and variable pay by taking the *maximum* of LTIP value. There have been heated debates on how best to measure and report LTIP value (Bachelder, 2013). BoardEx takes the maximum value, rather than target value represented by the grant-date value, of the incentive plans, where the target values are typically used for ratios computation by the firm and required to do so by some regulators[26]. BoardEx, despite its inconformity to corporate practices in reporting variable pay ratios, allows for international comparisons by applying a consistent standard. Further, this consistency in standards allowed us to implicitly compare the *de facto* cap on variable pay that companies have chosen to impose, with or without regulatory caps. We acknowledge that such cross-jurisdiction comparison may come at the expense of comparing within-nation levels of the values or ratios concerned. Put differently, our data are unlikely to be subject to reliability issues due to consistency of standards but may be challenged in terms of validity.

When comparing executive pay across jurisdictions, we had to make conscious trade-offs in simplifying the various corporate governance systems which are different and unique in their own way. Notably, LTIP can include both equity and non-equity components, while pension benefits can include both fixed and variable pay components.

[26] For instance, in the U.S. the reported values of stock awards (including those in LTIP) in the Summary Compensation Table are "market value of shares on the date of grant" (Bachelder, 2013).

5. Regulation effects and effectiveness

In the previous chapters we discussed how executive remuneration regulations vary across jurisdictions (chapter 3) and how actual executive remuneration practices vary across these same countries/regions (chapter 4). In this chapter we explore whether and how (1) executive remuneration regulations affect executive pay, and (2) how executive pay affects risk-taking. Both linkages are important, as policy makers have (1) sought to curb excessive compensation to (2) *mitigate* excessive risk taking.

We organise this chapter as follows. First, we conceptualise the pay structure to understand how executive pay is designed and implemented. Second, we identify and discuss three streams in the literature on the effects and effectiveness of pay regulations, focusing on the effects of (a) clawback provisions, (b) deferrals and bonus caps, and (c) say-on-pay laws. Third, we present our conclusions.

The funnel of remuneration

We conceptualize the design of remuneration structure as a *three-stage process*, best illustrated by the image of a funnel where each step leaves a smaller room to manoeuvre. For a good understanding we refer to the discussion of the differences between malus and clawbacks in chapter 3 (p. 13).

Figure 2. The funnel of remuneration design and implementation

The first stage is to lay out the remuneration structure and scheme governing remuneration contracts. The boundaries of what clauses to include and how to include them are set by regulations and laws, as well as norms, accepted practices and soft laws (e.g. a corporate governance code). The most critical boundary factor is the regulator's assessment and desire for regulation, considering both domestic and international developments and economic, political, societal demands. Thus, regulators constantly evaluate existing regulations and impose new ones. Likewise, domestic and international shareholders may propose and demand substantial changes in remuneration practices.

The second stage is up to the bank and the executive, who negotiate about the remuneration package, including the performance assessment in the context of variable pay. The executive delivers efforts to achieve the agreed objectives (e.g. enhance bank performance or grow in specified markets), and the deal specifies the corresponding assessments depending upon the

design, e.g. interim and final assessments. This second stage is much more subject to the two negotiating parties (i.e. the bank and the executive).

This has implications for shareholders. As illustrated in chapter 3, even if shareholders vote against the final remuneration proposal, they are not very likely to sway the proposal. In U.S. listed firms, as an example, shareholders are only able to submit a yes-or-no vote on the whole pay package of named executive offices but not on specific elements (Thomas & van der Elst, 2015). In the UK, with binding Say-on-Pay (SoP) votes effective since 2013, if shareholders vote against a remuneration package, firms will need to revise the failed policies and in the meantime stick with the previously agreed practices. Thus, SoP laws effectively open lines of communication between management and shareholders and proxy advisors (Thomas & van der Elst, 2015). However, shareholders and proxy advisers have more influence on remuneration policies in the *first* stage of the funnel.

The third stage refers to the option to recover or repair the remuneration contract. Over the past years, clawback clauses have grown more prevalent in remuneration contracts, as highlighted by the U.S. SEC's recent adoption DFA Section 954 on clawbacks (discussed in chapter 3).

One might expect that with the growing prevalence of clawback clauses, clawbacks are also applied more frequently. However, this is hardly the case. Clawbacks are difficult to enforce due to numerous legal, economic, accounting, and social barriers and challenges. The proof of guilt, scope and quantum, recovery, period of applicability are all hard to establish. In most jurisdictions there are few or even no precedents of successful largescale clawbacks.

Does this mean that clawbacks have no claws? Not necessarily. Occasionally, banks and executives apply *voluntary clawbacks* to signal good faith. Thus, clawbacks may have what finance scholars call a "signalling effect". Bank executives may accept such clauses to show that they are acting in good faith whilst companies put down such provisions to indicate their determination to punish misconducts (Financial Stability Board, 2021, p. 23).

In its most recent progress report on principles and standards implementation, the Financial Stability Board (FSB) identified potential clawback barriers and difficulties in view of the growing number of jurisdictions that issued supervisory guidance on clawback application (Financial Stability Board, 2021, p. 20-22). It even warns of unintended consequences: in economic terms, the costs of legal actions may be very high and render the final net benefits of clawbacks insignificant. From an accounting, taxation and social security perspective, reversals may even be difficult and expensive both for the bank and the executive, especially if the amounts involved are considerable. Having clawbacks in place could also make the bank

more vulnerable to reputational risks, as the public might reproach the bank for its failure to prevent misconduct in advance. From a company point of view clawbacks only make sense in the case of grave misconduct (Financial Stability Board, 2021, p. 21).

Literature review on effects and effectiveness of pay regulations

We identify three streams of literature following our three-stage funnel conceptualisation of executive pay design and implementation. Stream 1 examines how clawback provisions affect risk taking (Stages 1 to 3). Stream 2 studies the effects of bonus caps (Stages 1 and 2). Stream 3 investigates the effects of SoP laws on executive pay and firm behaviour (Stages 1 and 2).

Within each literature stream we first present the consensus view (if there is such a view). Then we discuss some critical issues. We end the discussions by providing our overall understanding of the literature.

Stream 1: Effects of clawback provisions – almost exclusively U.S. data

Velte (2020) reviews the empirical studies that examine the effects of clawback provisions that were published during the period 2011 to early 2020.[27] The author finds that most studies use U.S. samples (42 out 44), investigate voluntary clawback adoption (with one exception), and rely on the use of a dummy variable to proxy clawback adoption (with two exceptions). Velte shows that there is consistent empirical evidence that 1) clawback provisions (voluntary and mandatory) reduce financial restatements and misstatements, and 2) voluntary clawback adoption reduces firm-level overinvestments, i.e. undesired or excessive risk taking. Both findings are in line with theoretical expectations and suggest that clawbacks may serve as an instrument strengthening companies' health.

As a next step we examine the effects of clawbacks on executive remuneration. We first discuss several studies that include financial firms. After that, we will broaden our scope and address studies that exclude the financial industry.

In a study covering the period 1996-2017 for all U.S. listed firms, Babenko, Bennett, Bizjak, Coles, and Sandvik (2023) documented evidence generally supportive of the consensus

[27] The underlying data are typically several years before the indicated year in the citation. This is because scholarly research needs to undergo a process of research development (three to more years writing and conferencing to obtain feedback for improvement) and double-blind peer-reviewed revisions (one to more years) before publication. In combination with data availability at the start of a research project (three years or more before for annual data), it is common for a published scholarly paper to contain data seven or even more years older than the publication year. This may even hold true for empirical studies using experiments.

outlined by Velte (2020) regarding clawback effects. To be specific, they show that firm's clawback adoption negatively relates to option grants to CEOs and top executives, reduces the risk-incentives that top executives might exploit by taking excess risk on the firm level, and attracts more institutional investors. Most importantly, the authors show that clawback adoption reduces firm risks, controlling for several other drivers that reduce firm risk. In another study that includes financial firms, Liu, Liu, and Yin (2023) concluded that clawback provisions favourably influence the executive pay structure by reducing agency costs. They attribute this effect to clawback's *ex post* "settling up" characteristics with respect to executive compensation, namely companies can recover funds instead of reliance on ex ante measures.

In a study of U.S. public firms (excluding financial services firms) Remesal (2018) came to similar conclusions. He showed that clawback adoption increases total compensation, through the increased usage of more long-term incentives to replace short-term incentives. More independent boards help mitigate increases in total pay mainly through controlling increases on long-term variable pay.

Several other studies that excluded the financial industry looked at the effects of clawback provisions.[28] Two such studies found an *increase in total CEO pay* following a *voluntary* adoption of clawbacks (Dehaan, Hodge, & Shevlin, 2013; Chen, Greene, & Owers, 2015), while another study (Natarajan and Zheng, 2019) found a *decrease in option values for CEOs* following *mandatory* adoption.

These three studies, none from the banking industry, arriving at partly conflicting conclusions, do not provide a sound basis for policy advice on their own. This suggests that the interplay between clawback provisions and individual remuneration components have not yet been fully understood. However, taking into consideration that largely consistent evidence has been reported for both inclusion and exclusion of the financial industry regarding clawback provisions (Babenko etal., 2023 Remesal, 2018), we see a potential for cautious generalisation. These studies suggest that introducing clawback provisions *may* have the unintended consequence of *increasing* CEO pay. Clawbacks apply to variable pay, hence in the presence of clawback provisions executives will (1) have an interest in a higher base pay and (2) may favour a higher portion of short-term variable pay.[29]

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[28] Studies examining voluntary clawbacks have typically excluded the financial services industry and focused on the period 2007-2013. Their main rationale to exclude financial firms are that these companies are subject to mandatory clawbacks because they received bail out funds from the US Troubled Asset Relief Program (TARP) as a result of the global financial crisis.

[29] Scholars have not yet adequately investigated the relationship between clawbacks and fixed vs. variable pay components. We conjecture that there may be three channels how clawbacks could increase pay: 1) clawbacks contain the element of an insurance contract, issued by

A multi-country meta-analysis study by van Essen, Heugens, Otten, and van Oosterhout (2012) found support for a (very modest) positive relationship between overall CEO pay and firm performance. While this study did include banks, banks were not analysed separately. The authors found substantial cross-country variation that they attributed to formal and informal institutions, such as laws and corporate governance practices. Interestingly, the authors found the strength of the overall pay-performance relationship to be strongest in Germany, followed by Switzerland and the U.S. The pay-performance relationship was weakest in the UK.

Stream 2: Effects of deferrals and bonus caps

Deferrals, misconduct, and attraction of talents

Sheedy, Zhang, and Liao (2023) found that in financial services (1) deferrals, by allowing for more superior monitoring, mitigate misconduct and (2) productive individuals tend to select deferred variable pay. Specifically, they concluded that to ensure increased compliance, deferrals alone are not sufficient. Deferrals must be combined with enhanced monitoring, proxied by a 90% audit rate in the study. The authors employed an experimental design, including both students and finance professionals in Australia, to assess the effects of different payment schemes, particularly fixed pay, variable pay with deferral, and variable pay without deferral. Their evidence[30] suggests that, in comparison to immediate variable payment schemes, strict compliance (no violations of risk policies) increases more under deferred variable payment schemes compared to fixed payment schemes, while strategic or careless violations (single violations without punishment) are reduced more under fixed payment schemes. Further, the authors suggest that there will be a "self-selection" of productive individuals who will be drawn to deferred incentive structures, highlighting "the importance of retaining and attracting talented and productive employees" (Sheedy *et al.*, 2023). This is line with Gopalan, Huang, and Maharjan (2021) who, using data from 2006 to 2018 in the US, also found that deferrals contribute to executive talent retention.

executives to the firm against the future uncertainty of losses; along these lines executives would demand an insurance premium paid as fixed salaries. Furthermore, 2) executives' risk preferences (uncertainty avoidance) may lead them to prefer more fixed pay and shorter-term variable pay over longer-term variable pay. Finally, 3) if clawbacks attract more productive individuals this may positively impact firm performance, thus increasing executives' firm-performance-related variable pay.

[30] This sentence refers to the professional sample which we believe to be more representative of the banking industry. Moreover, the student sample results included some contradictory results.

Sheedy *et al.* (2023) highlighted the importance of (1) monitoring efforts (2) on top of longer time horizons. Re. time horizons, Gopalan, Milbourn, Song, and Thakor (2014) concluded that shorter CEO pay horizon induces myopic behaviour detrimental to the firm, while Kolasinski and Yang (2018) found that longer CEO equity pay horizon reduces legal settlements and fines for the firm in cases of fraud.

The SEC (and six other US agencies)'s 2016 proposal on joint rulemaking of Dodd-Frank Section 956 (SEC et al., 2016) contained a detailed economic analysis and discussions (by SEC) on the costs and benefits of various deferral requirements on variable remuneration, in particular percentages, horizons, and types – cash and equity-linked instrument. The potential costs and unintended consequences largely reflect our interim conclusions and are in line with our reasoning on alignment and incentive distortion.

Bonus caps and risk taking

To uncover the effects of bonus caps on risk taking, Kreilkamp, Matanovic, Sommer, and Wöhrmann (2021) employed an online experiment of US participants. The authors argued that pay caps affect risk-averse decision makers *contrary to rational choice theory predictions*. Bonus caps may result in dysfunctional low levels of risk-taking for exploiting entrepreneurial opportunities.

The implications of this study can be best understood by putting together the evidence offered by Sheedy *et al.* (2023) and our previous discussions.

First, bonus caps can be seen as a mixture of or an intermediate between deferred variable pay and fixed pay. That is, if an individual exerts high enough efforts, bonus caps transform a variable pay structure into a fixed pay scheme after crossing some performance thresholds, as illustrated by Murphy (2013, p. 647). This, by the findings of Sheedy and colleagues (2023), might induce talents to select payment schemes without such caps, e.g. by moving to jurisdictions or industries without such caps (our chapters 3 and 4 provide some indications).

Second, the effect of bonus caps on reducing risk-taking is to be expected because the cap directly *limits the upward potential* of such incentives. The unintended consequence may be that executives engage in risk-taking levels *below* the normal or desired ones.

Third, as shown by Murphy (2013), bonus caps would increase fixed pay, and thus fixed costs to the firm, particularly so in cases of low firm performances.

Fourth, evaluating empirical studies on limiting bonuses in the EU and the UK, Zalewska (2023) concluded that "the literature suggests that the regulatory focus on limiting bonuses

does not seem to be an effective tool in curbing risk taking" (p. 169, *ibid.*). While endorsing the purpose of increasing systemic resilience and reducing excessive risk taking, countries such as the US, Canada, and Australia made less prescriptive remuneration reforms than the EU. Nevertheless, the US, Canada, and Australia also saw the stability of their banking sectors improve and stress tests showed the resilience of their banks to be comparable with those of the EU and the UK. Zalewska's work suggests there may be *alternative pathways* to increasing systemic resilience and reducing excessive risk taking, i.e., (1) less restrictive regulations combined with stakeholder engagement, vs. (2) tighter regulations. Policy makers appear to have a choice between different viable alternatives.[31]

Stream 3: Effects of Say on Pay (SoP) laws

Some shareholders have long complained that executives are being paid without considering their performance. Based on these frustrations shareholders have sought to gain influence over executive pay decisions (Thomas & van der Elst, 2015). In several jurisdictions in recent years governments have responded to such concerns with new legislative initiatives. Despite the multitude of SoP laws across different jurisdictions (cf. Thomas & van der Elst, 2015, p. 655, footnote 5), SoP laws typically stipulate that in annual general meetings (AGMs) there will be mandatory votes for shareholders to cast upon a proposal prepared by board of directors on executive remuneration policies. (See chapter 3 for more details.)

CEO Pay level, CEO pay-for-performance

Lozano-Reina and Sánchez-Marín (2020) showed that agency theory dominates the literature on the effects of SoP laws. However, scholars do not agree on the causal mechanisms how SoP laws will affect executive remuneration. A first strand of literature argues that SoP laws reduce agency costs and bring about more effective remuneration design. Taking an opposite view, a second strand of literature contends that shareholders are neither well incentivised nor equipped with adequate knowledge to vote on executive pay. In practice, shareholders often rely on the recommendation of proxy advisors to cast votes, particularly in the US.

[31] Further, one of the concerns raised by the 2008 GFC and thus a primary objective of regulations on banks is to reduce banks' systemic importance. By BIS's G-SIB denominators (Basel Committee on Banking Supervision, 2021), this goal does not seem to attain priority nor sustained success, if not having accrued failure. Perhaps this growth in size is not surprising after all, as tougher regulations and heightened needs for compliance suggest larger size or economies of scale to deal with the increasing fixed and variable costs in the rising complexities of compliance.

In a response to address European regulators' informational demand on the role of proxy advisors (PA), Hitz and Lehmann (2018) studied 14 European countries during the period 2008 to 2010. Their findings show that the role of PA, in these 12 EEA countries plus the UK and Switzerland, is economically important and qualitatively similar to that of PA in the US. First, PA recommendations to vote against proposals (rejection) are linked with shareholder voting, yet this relationship is weaker in Europe compared to the US. Second, investors react negatively, as in the US, to PA rejections. Both of are in line with US causal evidence, suggesting the important role PA assumes in shaping how shareholders vote at AGMs. Further, they find that the supply of PA services increases with weaker country-level investor protection and higher firm-level outside ownership.

Lozano-Reina and Sánchez-Marín (2020) examined SoP effectiveness from 35 empirical studies of single-countries: US (18 studies), UK (7), Australia (6), Germany (2), the Netherlands (1), and Spain (1). The typologies of SoP laws vary across these jurisdictions. They are mandatory but advisory in the US and Spain, mandatory and binding in the Netherlands, and voluntary in Germany. SoP laws in the UK and Australia started as mandatory but non-binding, and subsequently tightened into a binding one in the UK and a more powerful one in Australia.

Lozano-Reina and Sánchez-Marín (2020) drew two conclusions: first, SoP laws improve CEO pay-for-performance for the U.S., the UK and Australia, most notably in the U.S. Second, the effectiveness of SoP laws varies significantly across the three EU countries.

Two extra studies assessed SoP law effectiveness in the UK and Germany. Examining the objectives of the UK's 2013 change into a mandatory and advisory SoP, Chu, Gupta, and Livne (2021) could not find evidence that the UK SoP law achieved its stated reform to 'restore a stronger, clearer link between pay and performance, reduce rewards for failure, and promote better engagement between companies and shareholders' (BIS, 2012). The authors did not find evidence that the 2013 reform of UK SoP law affected pay levels, pay-for-performance sensitivity, and dissent voting on remuneration report. In contrast, Obermann (2018) studied Germany's advisory SoP law and found that it helped shape pay structure but did not affect pay level. Shareholders prefer certain pay structures and Obermann suggested that advisory SoP laws motivated German supervisory boards to effectuate an investor-management alignment. He also found that the alignment benefits from using stocks marginally diminished.

In a multi-country context, Correa and Lel (2016) studied 11 countries that passed SoP laws (4 binding and 7 advisory/non-binding) from 2002 to 2012 in a group of 38 countries. They

found that mandatory SoP laws, whether binding or advisory, are linked with decreasing CEO pay levels and increasing sensitivity of CEO pay to firm performance. While cautioning that there are many factors at work here, they found that advisory SoP laws have *tighter* links (with decreasing CEO pay levels and increasing sensitivity of CEO pay to firm performance) than binding ones. They also examined voluntary SoP regimes similar to SoP laws. Their cases included Canada (2010), Germany (2009), Spain (2008), Switzerland (2009) and they concluded that voluntary SoP increased CEO pay without improving the link between CEO pay and firm performance.

In sum, there is academic consensus on the positive effects SoP laws have in promoting a dialogue on remuneration between shareholders and the boards of directors. However, some scholars have pointed out that SoP laws may have a broader impact on corporate governance. Thomas & van der Elst (2015, p. 653) refer to concerns raised in the Australian Parliament that SoP laws may take over the board's responsibility and undermine its authority.

Remuneration committee and CEO pay

Above we referred to the conundrum of whether and to what extent a legislator can or should extend its influence to executive remuneration decisions which are the domain of the board of directors, the bank, and their shareholders. This conundrum also holds for the working of the remuneration committee (RemCo, *Vergütungsausschuss*).

The RemCo is a group of (ideally independent) board members who set the CEO and executive committee's remuneration packages. The RemCo members are proposed by the board and elected at the AGM to assist the board. In simplified terms, the RemCo has the following tasks:[32]

1. Develop a remuneration policy in line with the bank's objectives and values;
2. Recommend the CEO's remuneration package (components and total amount) to the board of directors;
3. Propose or approve the CEO's total remuneration (the exact RemCo role varies depending on jurisdictions and company practices);
4. If necessary, seek external professional advice from pay consultants.

[32] For a detailed description of the UBS compensation committee, see UBS Group AG (2023).

Research on the workings of remuneration committees (not specifically in banking but across all industries) has identified at least three challenges.

First, RemCos do not necessarily have the expertise to put together the right CEO pay package with the right incentives. Doing so requires highly specialised expertise which is not a dominant selection criterion for board members. Board members are rather elected for their industry, financial or strategic expertise, instead of their deep understanding of executive "compensation and benefits".

Second, RemCos do not necessarily have the incentive to adequately monitor the exact effects of the CEO's pay package, particularly on top of their tasks of performance evaluation. For example, Sun and Cahan (2009) found that it is more difficult to monitor CEO remuneration contracts among high-growth or loss-incurring companies.

Third, therefore, RemCos often rely on pay consultants to design the remuneration packages. This reliance, however, may exacerbate the second problem of monitoring incentives, since pay consultants have no incentive to monitor. Conyon and Peck (1998) already found that RemCos are not adequately equipped for designing remuneration schemes. Conyon, Peck and Sadler (2009) documented how pay consultants effectively contributed to increasing levels of executive pay. Murphy and Sandino (2010) also documented that CEO pay levels are higher in firms where pay consultants work for the boards compared to firms whose consultants work for the management. Notably, a study on Switzerland confirmed that remuneration committees were associated with higher executive pay (Hengartner and Ruigrok, 2011). However, several subsequent studies in the US found no evidence that higher pay levels were the result of hiring pay consultants (Armstrong, Ittner, & Larcker, 2012; Murphy & Sandino, 2014)[33].

In a more recent study that examined how the use of consultant affects CEO pay level and structure, Murphy and Sandino (2020) found that the composition (portion of variable pay) and complexity (number of pay components) of pay packages were the main drivers of excessive CEO pay. Their evidence was also suggestive of some companies' boards layering new incentive plans over extant ones, which increases both composition and complexity of the pay packages that elevates CEO pay beyond the demand of the CEO. The findings of Murphy and Sandino (2020) offer insights into interpreting our analysis of the long-term incentive

[33] To be specific, Murphy and Sandino (2014), using panel data, found that CEO pay did not increase *right after* hiring consultants. Armstrong etal. (2012), using cross-sectional data, matched firms that hired consultants with those that did not (by economic and governance characteristics), and found no differences in pay level. Thus Armstrong and colleagues attributed the pay differences to firms' governance.

plans (LTIPs) of Credit Suisse and UBS in chapter 4. Burkert, Oberpaul, Tichy, and Weller (2023) found a negative impact of CEO pay complexity on accounting returns, stock returns, and ESG performance.

It is very difficult for shareholders to counteract these control failures, as shareholders usually have even less critical company and industry information than RemCo members and have even less expertise and fewer incentives to monitor than board members.

Method

We followed a multi-step approach with repetitive nature to identify and review the relevant literature. First, we used the keywords identified in chapter 3 to start our literature search in several search engines to triangulate, including Web of Science through EBSCOHost, Google Scholar, and Connected Papers. Second, we scanned through the titles and abstracts to identify relevant studies. Third, we prioritised more in-depth reading on review papers, with active tracing back to the referenced papers. Fourth, we searched for papers cited by and referenced in the relevant papers, repeating the above three steps. Most important, we applied a lens with two specific foci: 1) we assigned more weights in our discussions to evidence from international studies including non-U.S. countries of interest as laid out in chapter 3, and 2) we highlighted whether studies explicitly focused on or excluded the financial sector or banks, thus cautioning or emphasising the applicability to banks.

6. Conclusions and Recommendations

Based on the previous chapters we formulate six recommendations.

6.1. Clawback provisions: recommendation with caution

Clawback provisions may deter firm-level financial misstatements as well as excessive risk taking. They also cater to a public sentiment of justice.

However, our recommendation comes with words of *caution*. First, most relevant studies on clawback provisions are based on data from the U.S. and from other industries than financial services. Second, there is some evidence that clawback provisions may lead to *higher* executive remuneration. Third, there have only been few successful cases of enforcing clawback provisions in the financial industry worldwide, due to numerous barriers and legal challenges. Therefore, the positive effects of introducing clawback provisions may be small.

6.2. Bonus caps: advise against

Bonus caps may have adverse effects by (1) repelling executive talent towards other jurisdictions or industries, 2) curbing necessary and appropriate levels of risk-taking, and 3) imposing higher fixed costs on banks that may weigh more heavily on banks in times of recession or crisis. Furthermore, bonus caps are difficult to implement due to the volatile nature of stock markets.

6.3. Say on Pay (SoP) law: no need for revisions

SoP laws help promoting a dialogue on remuneration between shareholders and the board of directors. There is no need for revising Swiss Say-on-Pay laws which are stricter than in many other countries. Further intensifying SoP laws may have undesirable effects on Swiss corporate governance by undermining the board's responsibility and its authority.

6.4. Deferrals: recommendation to extend deferral periods

Deferral periods may be extended by introducing a holding period upon vesting or establishing a longer vesting period for variable pay. Doing so may have several important benefits. First, extending the deferral period will reduce or avoid altogether the difficulty of applying legal clawbacks while it will enable the option of a *de facto* clawback through a malus provision. Second, extending the deferral period will increase talent retention for the bank by reducing voluntary executive turnovers. Third, extending the deferral period will offer a longer period for monitoring from the stakeholder perspective.

However, also here we have words of *caution*. Extending the deferral period may have the consequence of *increasing total executive pay* as executives' wealth will be less diversified.

6.5. Swiss SIBs: Professionalise the Remuneration Committee (RemCo)

Remuneration Committees have not always functioned perfectly, as the case of the Credit Suisse RemCo illustrated. It is essential that banks' boards of directors elect expert RemCo members and institute adequate pay-setting and evaluation processes. Doing so will increase accountability for executive remuneration, strengthen market-based solutions for managing banks' growth and future crises, and prevent that the federal government sees a need to intervene and set rules for the functioning of RemCos.

6.6. Government: prevent legislative overreach

The Swiss government's principles- and proportionality-based approach allows for a constant benchmarking of financial developments and a constructive communication with financial institutions. Moreover, the Swiss government's pragmatic approach makes it possible to monitor and learn from regulations, guidelines, and practices adopted in other countries. Government regulations are an imperfect and costly substitute for adequate supervision and monitoring by a bank's board of directors. Regulations easily have unintended consequences and are only called for if corporate governance at Swiss banks has failed. The downfall of one emblematic G-SIB, however regrettable, does not imply that corporate governance has failed across the whole spectrum of Swiss SIBs or the Swiss banking system.

7. References

Ammann, M., Käfer, N., & Wiest, T. (2023). *Reformbedarf in der Regulierung von «Too Big to Fail» Banken*. https://www.newsd.admin.ch/newsd/message/attachments/79254.pdf. Accessed 13 October, 2023.

Ang, L. (2020). Capitalist Variations in" Say on Pay": A Look at Corporate Governance Contradictions in Singapore and Hong Kong. *University of Pennsylvania Asian Law Review, 15 (2)*, 222-283. https://heinonline.org/HOL/Page?handle=hein.journals/etalr15&id=223&collection=journals&index=

Armstrong, C. S., Ittner, C. D., & Larcker, D. F. (2012). Corporate governance, compensation consultants, and CEO pay levels. *Review of Accounting Studies*, *17*, 322-351. https://doi.org/10.1007/s11142-012-9182-y

Babenko, I., Bennett, B., Bizjak, J. M., Coles, J. L., & Sandvik, J. J. (2023). Clawback provisions and firm risk. *The Review of Corporate Finance Studies*, *12*(2), 191-239. https://doi.org/10.1093/rcfs/cfad003

Bachelder, J. E. (2013). *Assigning Value to Long-Term Incentive Pay.* Harvard Law School Forum on Corporate Governance. https://corpgov.law.harvard.edu/2013/01/28/assigning-value-to-long-term-incentive-pay/#2. Accessed 13 October, 2023.

Bank for International Settlements (BIS) (2012). *Directors' Pay: Guide to Government Reforms* (BIS: 12/900). https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/31653/12-900-directors-pay-guide-to-reforms.pdf. Accessed 13 October, 2023.

Basel Committee on Banking Supervision (2018). *Global systemically important banks: revised assessment methodology and the higher loss absorbency requirement.* Bank for International Settlements (BIS). https://www.bis.org/bcbs/publ/d445.htm. Accessed 13 October, 2023.

Basel Committee on Banking Supervision (2021). *G-SIB Framework: Denominators.* Bank for International Settlements (BIS). https://www.bis.org/bcbs/gsib/denominators.htm. Accessed 13 October, 2023.

Brems M., Hafemann J., Witt B., & Begiebing M. (2016). Germany. In Kohn A. & Cooper J. (Eds.), The Executive Remuneration Review (5th ed., pp. 97-119). Law Business Research

Ltd. https://www.clearygottlieb.com/-/media/organize-archive/cgsh/files/other-pdfs/the-executive-remuneration-review-germany.pdf. Accessed 13 October, 2023.

Burkert, S., Oberpaul, T., Tichy, N., & Weller, I. (2023). Executive Compensation Complexity and Firm Performance. *Academy of Management Discoveries*. Advance Online Publication. https://doi.org/10.5465/amd.2022.0056

Chen, M. A., Greene, D. T., & Owers, J. E. (2015). The costs and benefits of clawback provisions in CEO compensation. *The Review of Corporate Finance Studies*, 4(1), 108-154. https://doi.org/10.1093/rcfs/cfu012

Cheng, Y., Harford, J., & Zhang, T. T. (2015). Bonus-driven repurchases. *Journal of Financial and Quantitative Analysis*, *50*(3), 447-475. https://doi.org/10.1017/S0022109015000149

Chu, J., Gupta, A., & Livne, G. (2021). Pay regulation–is more better? *Accounting and Business Research*, *51*(1), 1-35. https://doi.org/10.1080/00014788.2020.1815515

Conyon, M. J., & Peck, S. I. (1998). Board control, remuneration committees, and top management compensation. *Academy of Management Journal*, *41*(2), 146-157. https://doi.org/10.5465/257099

Conyon, M. J., Peck, S. I., & Sadler, G. V. (2009). Compensation consultants and executive pay: Evidence from the United States and the United Kingdom. *Academy of Management Perspectives*, *23*(1), 43-55. https://doi.org/10.5465/amp.2009.37008002

Correa, R., & Lel, U. (2016). Say on pay laws, executive compensation, pay slice, and firm valuation around the world. *Journal of Financial Economics*, *122*(3), 500-520. https://doi.org/10.1016/j.jfineco.2016.09.003

Council of the European Union (2023a). *Basel III finalisation (CRD VI) - Proposal for a Directive of the European Parliament and of the Council amending Directive 2013/36/EU as regards supervisory powers, sanctions, third-country branches, and environmental, social and governance risks, and amending Directive 2014/59/EU - Initial positions of the three Institutions prior to commencement of trilogues. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CONSIL:ST_8854_2023_INIT.* Accessed 13 October, 2023.

Council of the European Union (2023b). *Basel III finalisation: Capital Requirements Regulation 3 (CRR 3) and Capital Requirements Directive VI (CRD VI) - Presidency debriefing on the outcome of the trilogue. https://data.consilium.europa.eu/doc/document/ST-11409-2023-INIT/en/pdf.* Accessed 13 October, 2023.

Credit Suisse Group AG (2013). *2013 Annual Report – Compensation*. https://www.credit-suisse.com/media/assets/corporate/docs/about-us/investor-relations/financial-disclosures/financial-reports/csg-ar13-compensation-en.pdf. Accessed 13 October, 2023.

Credit Suisse Group AG (2014). *2014 Annual Report – Compensation*. https://www.credit-suisse.com/media/assets/corporate/docs/about-us/investor-relations/financial-disclosures/financial-reports/csg-ar14-compensation-en.pdf. Accessed 13 October, 2023.

Credit Suisse Group AG (2019). *2019 Annual Report – Compensation*. https://www.credit-suisse.com/media/assets/corporate/docs/about-us/investor-relations/financial-disclosures/financial-reports/csg-ar19-compensation-en.pdf. Accessed 13 October, 2023.

Credit Suisse Group AG (2021). *2021 Annual Report – Compensation*. https://www.credit-suisse.com/media/assets/corporate/docs/about-us/investor-relations/financial-disclosures/financial-reports/csg-ar21-compensation-en.pdf. Accessed 13 October, 2023.

Credit Suisse Group AG (2022). *2022 Annual Report – Compensation*. https://www.credit-suisse.com/media/assets/corporate/docs/about-us/investor-relations/financial-disclosures/financial-reports/csg-ar22-compensation-en.pdf. Accessed 13 October, 2023.

De Cesari, A., & Ozkan, N. (2015). Executive incentives and payout policy: Empirical evidence from Europe. *Journal of Banking & Finance*, *55*, 70-91. https://doi.org/10.1016/j.jbankfin.2014.12.011

Dehaan, E., Hodge, F., & Shevlin, T. (2013). Does voluntary adoption of a clawback provision improve financial reporting quality? *Contemporary Accounting Research*, *30*(3), 1027-1062. https://doi.org/10.1111/j.1911-3846.2012.01183.x

Department of Justice, Government of Hong Kong (2022). *Cap. 155 Banking Ordinance.* Hong Kong e-Legislation. https://www.elegislation.gov.hk/hk/cap155?xpid=ID_1438402726487_001. Accessed 13 October, 2023.

ESMA and EBA (European Securities and Markets Authority and European Banking Authority) (2023). *Report: Implementation of SRD2 provisions on proxy advisors and the investment chain* European Securities and Markets Authority (ESMA). https://www.esma.europa.eu/sites/default/files/2023-07/ESMA32-380-267_Report_on_SRD2.pdf. Accessed 13 October, 2023

Expert Group on Banking Stability (2023). *The need for reform after the demise of Credit Suisse.* The Federal Council of the Swiss Confederation.

https://www.efd.admin.ch/dam/efd/en/finanzplatz/uebernahme-cs-ubs/bericht-expertengruppe.pdf. Accessed 13 October, 2023.

Financial Conduct Authority of the UK (FCA) (2023). *Dual-regulated firms Remuneration Code (SYSC 19D)*. https://www.handbook.fca.org.uk/handbook/SYSC/19D.pdf. Accessed 13 October, 2023.

Federal Council of the Swiss Confederation (2023a). *Federal Council adopts special dispatch on guarantee credits for Swiss National Bank and UBS.* https://www.admin.ch/gov/en/start/documentation/media-releases.msg-id-94030.html. Accessed 13 October, 2023.

Federal Council of the Swiss Confederation (2023b). *Federal Council adopts dispatch on introduction of a public liquidity backstop for systemically important banks*. https://www.efd.admin.ch/efd/en/home/the-fdf/nsb-news_list.msg-id-97631.html. Accessed 13 October, 2023.

Federal Department of Finance of the Swiss Confederation (2023a). *Federal Council measures concerning variable remuneration at Credit Suisse/UBS.* https://www.efd.admin.ch/efd/en/home/financial-affairs/ubs-takeover-credit-suisse%20/measures-variable-remuneration-cs-ubs.html#-2073986073. Accessed 13 October, 2023.

Federal Department of Finance of the Swiss Confederation (2023b). *Timeline for the takeover of Credit Suisse by UBS.* https://www.efd.admin.ch/efd/en/home/financial-affairs/ubs-takeover-credit-suisse%20/timeline-cs-ubs.html. Accessed 13 October, 2023.

Federal Financial Supervisory Authority of Germany (BaFin) (2023). *Regulation on the Supervisory Requirements for Institutions' Remuneration Systems: Remuneration Regulation for Institutions (Institutsvergütungsverordnung, InstitutsVergV)*. Federal Ministry of Justice (Bundesministerium der Justiz, BMJ). https://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Aufsichtsrecht/Verordnung/InstitutsVergV_ba_en.html. Accessed 13 October, 2023.

Federal Ministry of Justice of Germany (Bundesministerium der Justiz, BMJ, 2023). *Gesetz über das Kreditwesen (Kreditwesengesetz - KWG)*. https://www.gesetze-im-internet.de/kredwg/. Accessed 13 October, 2023.

Federal Office of Justice of the Swiss Confederation (2014). *Company law to be modernised* https://www.isc-ejpd.admin.ch/bj/en/home/aktuell/mm.msg-id-55451.html. Accessed 13 October, 2023.

Federal Office of Justice of the Swiss Confederation (2022). *Revision of company law: Amendment to the Swiss Code of Obligations.* *https://www.ejpd.admin.ch/bj/en/home/wirtschaft/gesetzgebung/archiv/aktienrechtsrevision14.html.* Accessed 13 October, 2023.

Financial Conduct Authority (FCA) (UK) (2023). *CP23/11: Remuneration: enhancing proportionality for dual-regulated firms*. https://www.fca.org.uk/publications/consultation-papers/cp23-11-remuneration-enhancing-proportionality-dual-regulated-firms. Accessed 13 October, 2023.

Financial Market Supervisory Authority of Switzerland (FINMA) (n.d.). *Too big to fail and financial stability - Systemically important banks.* *https://www.finma.ch/en/enforcement/recovery-and-resolution/too-big-to-fail-and-financial-stability/systemically-important-banks/.* Accessed 13 October, 2023.

Financial Market Supervisory Authority of Switzerland (FINMA) (2015). *Circular 2010/1 Remuneration schemes: Minimum standards for remuneration schemes of financial institutions*. https://www.finma.ch/en/~/media/finma/dokumente/rundschreiben-archiv/2010/rs-10-01/finma-rs-2010-01-30-06-2017.pdf. Accessed 13 October, 2023.

Financial Stability Board (2009a). *FSF Principles for Sound Compensation Practices* (FSF is the predecessor to the FSB). https://www.fsb.org/wp-content/uploads/r_0904b.pdf. Accessed 13 October, 2023.

Financial Stability Board (2009b). *FSB Principles for Sound Compensation Practices: Implementation Standards*. https://www.fsb.org/wp-content/uploads/r_090925c.pdf. Accessed 13 October, 2023.

Financial Stability Board (2021). *Effective Implementation of FSB Principles for Sound Compensation Practices and Implementation Standards: 2021 Progress Report*. https://www.fsb.org/2021/11/effective-implementation-of-fsb-principles-for-sound-compensation-practices-and-implementation-standards-2021-progress-report/. Accessed 13 October, 2023.

Financial Times (2023a). *League Tables: Deals*. https://markets.ft.com/data/league-tables/tables-and-trends. Accessed 13 October, 2023.

Financial Times (2023b). *Santander chair Ana Botín welcomes UK banker bonus cap removal. https://www.ft.com/content/fdf24aa0-a5f9-43a9-bac8-ba48be5fa03e.* Accessed 29 November, 2023.

Financial Times (2023c). *Deutsche Bank chief says EU should consider scrapping bonus cap. https://www.ft.com/content/4f5eb7fc-fd51-45c2-ac23-2c08ae0170f3.* Accessed 29 November, 2023.

G20 Information Centre (2011). *G20 Leaders Statement: The Pittsburgh Summit, September 24 - 25, 2009.* University of Toronto. http://www.g20.utoronto.ca/2009/2009communique0925.html. Accessed 13 October, 2023.

Glass Lewis (2023a). *2023 Policy Guidelines: Germany. https://shorturl.at/hHQW5.*

Accessed 13 October, 2023.

Glass Lewis (2023b). *Glass Lewis Benchmark Policy — Market-Specific Policies.* https://www.glasslewis.com/voting-policies-current/. Accessed 13 October, 2023.

Gopalan, R., Huang, S., & Maharjan, J. (2021). The role of deferred equity pay in retaining managerial talent. *Contemporary Accounting Research*, *38*(4), 2521-2554. https://onlinelibrary.wiley.com/doi/epdf/10.1111/1911-3846.12696.

Gopalan, R., Milbourn, T., Song, F., & Thakor, A. V. (2014). Duration of executive compensation. *The Journal of Finance*, *69*(6), 2777-2817. https://doi.org/10.1111/jofi.12085

Greene, E. F., & Gottlieb, C. (2012). *Binding Shareholder Say-on-Pay Vote in UK*. Harvard Law School Forum on Corporate Governance. https://corpgov.law.harvard.edu/2012/07/31/binding-shareholder-say-on-pay-vote-in-uk/. Accessed 13 October, 2023.

Gryglewicz, S., Mayer, S., & Morellec, E. (2020). Agency conflicts and short-versus long-termism in corporate policies. *Journal of Financial Economics*, *136*(3), 718-742. https://doi.org/10.1016/j.jfineco.2019.12.003

Hengartner, L., & Ruigrok, W. (2011). Pay for power?. In *Der Anstieg der Management-Vergütung: Markt oder Macht?* (pp. 100-116). Nomos Verlagsgesellschaft mbH & Co. KG. https://doi.org/10.5771/9783845232355-100

Ho (2022). *SEC Adopts Dodd-Frank Executive Compensation Clawback Rules.* Thomson Reuters. https://tax.thomsonreuters.com/news/sec-adopts-dodd-frank-executive-compensation-clawback-rules/. Accessed 13 October, 2023.

Hong Kong Monetary Authority (2021). *Supervisory Policy Manual: Guideline on a Sound Remuneration System (CG-5)*. *https://www.hkma.gov.hk/media/eng/doc/key-functions/banking-stability/supervisory-policy-manual/CG-5.pdf.* Accessed 13 October, 2023.

Kim, S., & Ng, J. (2018). Executive bonus contract characteristics and share repurchases. *The Accounting Review*, *93*(1), 289-316. https://doi.org/10.2308/accr-51731

Khan, Terrism, Meggeson, & Taqi (2023). *The world's 100 largest banks, 2023*. S&P Global: Market Intelligence. https://www.spglobal.com/marketintelligence/en/news-insights/research/the-world-s-100-largest-banks-2023. Accessed 13 October, 2023.

Kolasinski, A. C., & Yang, N. (2018). Managerial myopia and the mortgage meltdown. *Journal of Financial Economics*, *128*(3), 466-485. https://doi.org/10.1016/j.jfineco.2017.03.010

Kreilkamp, N., Matanovic, S., Schmidt, M., & Wöhrmann, A. (2023). How executive incentive design affects risk-taking: a literature review. *Review of Managerial Science*, *17*(7), 2349-2374. https://doi.org/10.1007/s11846-022-00582-0

Kreilkamp, N., Matanovic, S., Sommer, F., & Wöhrmann, A. (2021). The effect of compensation caps on risk-taking. *Journal of Management Accounting Research*, *33*(3), 77-95. https://doi.org/10.2308/JMAR-18-053

Liao, C. H., & Hsu, A. W. H. (2013). Common membership and effective corporate governance: Evidence from audit and compensation committees. *Corporate Governance: An International Review*, *21*(1), 79-92. https://doi.org/10.1111/corg.12000

Liu, H., Liu, H., & Yin, J. (2023). The impact of clawback provisions on executive cash compensation. *Review of Quantitative Finance and Accounting*, 1-28. https://doi.org/10.1007/s11156-023-01136-5

Lozano-Reina, G., & Sánchez-Marín, G. (2020). Say on pay and executive compensation: A systematic review and suggestions for developing the field. *Human Resource Management Review*, *30*(2), 100683. https://doi.org/10.1016/j.hrmr.2019.01.004

Monetary Authority of Singapore (MAS) (2022). *Notice 637 Risk Based Capital Adequacy Requirements for Banks Incorporated in Singapore (dated 28 July 2022)*. https://www.mas.gov.sg/-/media/mas/regulations-and-financial-stability/regulations-guidance-and-licensing/commercial-banks/regulations-guidance-and-licensing/notices/mas-notice-637-effective-1-jan-2023.pdf. Accessed 13 October, 2023.

Moore, D. (2023). Strategic repurchases and equity sales: Evidence from equity vesting schedules. *Journal of Banking & Finance*, *146*, 106717. https://doi.org/10.1016/j.jbankfin.2022.106717

Murphy, K. J. (2013). Regulating banking bonuses in the European Union: A case study in unintended consequences. *European Financial Management*, *19*(4), 631-657. https://doi.org/10.1111/j.1468-036X.2013.12024.x

Murphy, K. J., & Sandino, T. (2010). Executive pay and "independent" compensation consultants. *Journal of Accounting and Economics*, *49*(3), 247-262. https://doi.org/10.1016/j.jacceco.2009.12.001

Murphy, K. J., & Sandino, T. (2014). *Are consultants to blame for high CEO pay*. Harvard Business School Working paper. https://www.hbs.edu/faculty/Shared%20Documents/conferences/2014-imo/Sandino%20IMO%202014.pdf. Accessed 13 October, 2023.

Murphy, K. J., & Sandino, T. (2020). Compensation consultants and the level, composition, and complexity of CEO pay. *The Accounting Review*, *95*(1), 311-341. https://doi.org/10.2308/accr-52439

Natarajan, R., & Zheng, K. (2019). Clawback provision of SOX, financial misstatements, and CEO compensation contracts. *Journal of Accounting, Auditing & Finance*, *34*(1), 74-98. https://doi.org/10.1177/0148558X16686740

Obermann, J. (2018). Can management-sponsored non-binding remuneration votes shape the executive compensation structure? Evidence from Say-on-Pay votes in Germany. *The European Journal of Finance*, *24*(17), 1609-1630. https://doi.org/10.1080/1351847X.2017.1419982

Parlamentarische Untersuchungskommissionen (PUK) (2023). *Arbeiten der Parlamentarischen Untersuchungskommission (PUK) zur CS-Notfusion gestartet.* Federal Assembly of Switzerland. https://www.parlament.ch/press-releases/Pages/mm-puk-2023-07-13.aspx?lang=1031. Accessed 13 October, 2023.

Parliament of Australia (2022). *Executive remuneration: a quick guide*. https://www.aph.gov.au/About_Parliament/Parliamentary_departments/Parliamentary_Library/pubs/rp/rp2223/Quick_Guides/ExecutiveRenumeration. Accessed 13 October, 2023.

Prudential Regulation Authority and Financial Conduct Authority (PRA and FCA, UK) (2016). *PRA and FCA statement on compliance with the EBA Guidelines on Sound*

Remuneration Policies. Financial Conduct Authority. *https://www.fca.org.uk/news/statements/pra-and-fca-statement-compliance-eba-guidelines-sound-remuneration-policies.* Accessed 13 October, 2023.

Prudential Regulation Authority and Financial Conduct Authority (PRA and FCA, UK) (2023a). *PS23/15: Remuneration: Ratio between fixed and variable components of total remuneration.* Financial Conduct Authority. https://www.fca.org.uk/publications/consultation-papers/cp22-28-remuneration-ratio-between-fixed-and-variable-components-total-remuneration-bonus-cap. Accessed 5 December, 2023.

Prudential Regulation Authority and Financial Conduct Authority (PRA and FCA, UK) (2023b). *PS9/23 – Remuneration: Ratio between fixed and variable components of total remuneration ('bonus cap').* Bank of England. https://www.bankofengland.co.uk/prudential-regulation/publication/2023/october/remuneration-ratio-between-fixed-and-variable-components-of-total-remuneration. Accessed 5 December, 2023.

Remesal, A. (2018). *Clawback provisions, executive pay, and accounting manipulation* (Working Paper No, 1808). CEMFI Spain. https://ideas.repec.org/p/cmf/wpaper/wp2018_1808.html. Accessed 13 October, 2023.

Ruigrok, W., & Hengartner, L. 2009. Management-Gehälter auf Höhenflügen: Entschädigungen auf den obersten Führungsebenen werden in Zukunft weiter steigen. *Neue Zürcher Zeitung*, 18 February. https://www.nzz.ch/management-gehaelter_auf_hoehenfluegen-ld.547325. Accessed 13 October, 2023.

Schoch, D., & Sieber, A. (2014). *Need for action triggered by the Ordinance Against Excessive Compensation in listed stock corporations (follow-up)*. MLL Meyerlustenberger Lachenal Froriep Ltd. https://www.mll-news.com/need-for-action-triggered-by-the-ordinance-against-excessive-compensation-in-listed-stock-corporations-follow-up/?lang=en. Accessed 13 October, 2023.

Schweizer Radio und Fernsehen (SRF, 2023, German only). *Nach Boni-Diskussionen: ZKB stellt Vergütungsmodell um*. https://www.srf.ch/news/wirtschaft/weniger-boni-mehr-fixlohn-nach-boni-diskussionen-zkb-stellt-verguetungsmodell-um#:~:text=Immer%20mehr%20Boni,erh%C3%B6hte%20sich%20derweil%20nur%20leicht. Accessed 28 October, 2023.

Sheedy, E., Zhang, L., & Liao, Y. (2023). Deferred pay: Compliance and productivity with self-selection. *Journal of Banking & Finance*, *154*, 106657. https://doi.org/10.1016/j.jbankfin.2022.106657

Sun, J., & Cahan, S. (2009). The effect of compensation committee quality on the association between CEO cash compensation and accounting performance. *Corporate Governance: An International Review*, *17*(2), 193-207. https://doi.org/10.1111/j.1467-8683.2008.00726.x

Swiss Confederation (2023), *Bundesgesetz über die Banken und Sparkassen (Bankengesetz, BankG) vom 8. November 1934 (Stand am 1. Januar 2023)*. https://www.fedlex.admin.ch/eli/cc/51/117_121_129/de. Accessed 13 October, 2023.

The Attorney-General's Chambers of Singapore, Government of Singapore (2021). *Banking Act 1970: 2020 Revised Edition*. https://sso.agc.gov.sg/Act/BA1970. Accessed 13 October, 2023.

The European Parliament and the Council of the European Union (2013). *Directive (EU) 2013/36 of The European Parliament and of The Council of 26 June 2013 (Directive 2013/36/EU, CRD IV)*. Official Journal of the European Union. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32013L0036. Accessed 13 October, 2023.

The European Parliament and the Council of the European Union (2017). *Directive (EU) 2017/828 of the European Parliament and of the Council of 17 May 2017 amending Directive 2007/36/EC as regards the encouragement of long-term shareholder engagement (Text with EEA relevance)*. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32017L0828. Accessed 13 October, 2023.

The European Parliament and the Council of the European Union (2019). *Directive (EU) 2019/878 of The European Parliament and of The Council of 20 May 2019 (Directive 2019/878/EU, CRD V*). Official Journal of the European Union. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019L0878. Accessed 13 October, 2023.

Thomas, R. S., & Van der Elst, C. (2015). Say on pay around the world. *Washington University Law Review, 92*(3), 653-732. https://heinonline.org/HOL/P?h=hein.journals/walq92&i=669

UBS Group AG (2019). *Compensation Report 2019*. https://www.ubs.com/global/en/investor-relations/financial-information/annual-reporting/ar-archive/_jcr_content/mainpar/toplevelgrid/col1/accordionbox/accordionsplit_1766217344/innergrid_778459529_/xcol2/linklist/link_copy.1213477060.file/PS9jb250ZW50L2RhbS9hc3NldHMvY2MvaW52ZXN0b3ItcmVsYXRpb25zL2FubnVhbC1yZXBvcnQvMjAxOS91YnMtZ3JvdXAtYWctY29tcGVuc2F0aW9uLTIwMTktZW4ucGRm/ubs-group-ag-compensation-2019-en.pdf. Accessed 13 October, 2023.

UBS Group AG (2023). *Organization Regulations of UBS Group AG: valid as of 12 June 2023.* https://www.ubs.com/global/en/our-firm/governance/ubs-group-ag/regulations/_jcr_content/mainpar/toplevelgrid/col1/linklist_991202963/link.0228918618.file/PS9jb250ZW50L2RhbS9hc3NldHMvY2MvYWJvdXQtdWJzL2RvYy8yMDIzLTA2LXVicy1ncm91cC1hZy1vcmctcmVncy1lbi5wZGY=/2023-06-ubs-group-ag-org-regs-en.pdf. Accessed 13 October, 2023.

United States Department of the Treasury (2009). *The Interim Final Rule on TARP Standards for Compensation and Corporate Governance — June 15, 2009*. https://home.treasury.gov/sites/default/files/initiatives/financial-stability/TARP-Programs/executive-comp/Documents/Interim%20Final%20Rule%20on%20Compensation%20and%20Corporate%20Governance.pdf. Accessed 13 October, 2023.

U.S. Securities and Exchange Commission (SEC) (2011). Investor Bulletin: Say-on-Pay and Golden Parachute Votes. https://www.sec.gov/files/sayonpay.pdf. Accessed 13 October, 2023.

U.S. Securities and Exchange Commission (SEC) (2015). *Listing Standards for Recovery of Erroneously Awarded Compensation. http://www.sec.gov/rules/proposed/2015/33-9861.pdf.* Accessed 13 October, 2023.

U.S. Securities and Exchange Commission (SEC) (2022). *Listing Standards for Recovery of Erroneously Awarded Compensation*. https://www.sec.gov/rules/final/2022/33-11126.pdf. Accessed 13 October, 2023.

U.S. Securities and Exchange Commission (SEC), Office of the Comptroller of the Currency, Treasury (OCC), Board of Governors of the Federal Reserve System (Board), Federal Deposit Insurance Corporation (FDIC), Federal Housing Finance Agency (FHFA), and National Credit Union Administration (NCUA) (2016). *Proposed rules (jointly with other regulators) regarding disclosure of, and prohibitions of, certain executive compensation structures and arrangements at certain financial institutions.* U.S. Securities and Exchange Commission. http://www.sec.gov/rules/proposed/2016/34-77776.pdf. Accessed 13 October, 2023.

Van Essen, M., Heugens, P. P., Otten, J., & Van Oosterhout, J. (2012). An institution-based view of executive compensation: A multilevel meta-analytic test. *Journal of International Business Studies*, *43*, 396-423. https://doi.org/10.1057/jibs.2012.6

Velte, P. (2020). Determinants and consequences of clawback provisions in management compensation contracts: a structured literature review on empirical evidence. *Business Research*, *13*(3), 1417-1450. https://doi.org/10.1007/s40685-020-00135-9

Vesper-Gräske, M. (2013). “Say on Pay” in Germany: the regulatory framework and empirical evidence. *German Law Journal, 14*(7), 749-795. https://doi.org/10.1017/S2071832200002017

Young, S., & Yang, J. (2011). Stock repurchases and executive compensation contract design: The role of earnings per share performance conditions. *The Accounting Review*, *86*(2), 703-733. https://doi.org/10.2308/accr.00000024

Zalewska, A. (2023). Bankers' remuneration reforms and new challenges. *Corporate Governance: An International Review*, *31*(1), 161-177. https://onlinelibrary.wiley.com/doi/full/10.1111/corg.12454

8. Appendix

Table A1: Overview of existing regulations: directly relevant articles or sections

Area	Reg short name	Variable Pay regulation			Variable pay instrument
		Cap	Deferral: time and proportion	Malus /Clawback provisions	
EU	CRD V, 2019	Article 94 of CRD IV, 2013 (page L 176/387), which remains **unchanged in CRD V**	Article 94 (page L 150/270)	Article 94 of CRD IV, 2013 (page L 176/389), which remains **unchanged in CRD V**	Articles 94 of CRD IV and CRD V in conjunction
UK	PRA and FCA Remuneration Codes, 2023	Remuneration Principle 12(d) (page SYSC 19D/19)	Remuneration Principle 12(g) (page SYSC 19D/22)	Remuneration Principle 12(h) (page page SYSC 19D/22)	Remuneration Principle 12(f) (page SYSC 19D/21)
DE	Remuneration Regulation for Institutions, 2023[34]	Article § 6 (page 7), in conjunction with Article § 25a (5) of the German Banking Act (KWG, 2023)	Article § 20 (page 13)	Article § 20 (page 13)	Article § 20 (page 13)
CH	Remuneration Schemes, 2016	NA	Principle 7 (page 8)	Principle 7 (page 8)	NA
HK	CG-5, 2021	NA	Section 2.4 (page 22)	Section 2.3.7 (page 21)	Section 2.2.2 (page 18)
SG*	MAS Notice 637, 2022	NA	Financial Stability Board (2021, page 20, Table 4)	Table 11-44F, page 11-101	NA
U.S.	DFA 954 (2015 version), adopted 2022	NA	NA	Whole document focuses on clawbacks	NA
U.S.	*DFA 956, 2016* ***Proposed***	*Implicit cap on options: Section E: Deferral (Page 46)*	*Section E: Deferral (Page 46)*	*Section E: Clawback (page 49) for clawbacks; Section E: Forfeiture and Downward Adjustment (page 48) for malus*	*Section E: Deferral (Page 47)*

Notes:
1. Pages in the parentheses following article or section only indicate the starting page, for convenience of the reader.
2. *As discussed in Table 1, SG deferral 3 year is indicated by the FSB report (Financial Stability Board, 2021), but we could not find in the relevant sections or use keyword searches in the series of MAS Notice 637 or SG's Banking Act 1970.

[34] English version is not binding and provided by BaFin (2023) (Federal Financial Supervisory Authority of Germany).

Terms of references stated by the Request for Proposal of SIF (German only)

Zielsetzungen

- Evaluation empirischer Evidenz in Form einer Metastudie u. a. zu folgenden Themen:
  - Wirksamkeit regulatorischer Massnahmen im Bereich der Vergütungen in Bezug auf das Verhalten der Entscheidenden, das Risikoprofil und den Unternehmenserfolg des Finanzinstituts
  - Auswirkungen der verschiedenen Vergütungssysteme auf die Anreize der Mitarbeitenden und damit auf das Risikoprofil des Instituts als Ganzes.
  - Wirksamkeit von Massnahmen, die es ermöglichen zugeteilte oder bereits ausgerichtete Vergütungsbestandteile zurückzufordern (Malus und «clawbacks»)
  - Vor- und Nachteile von Verboten variabler Vergütungen und von fixen Limiten (z. B. absolut in Bezug auf Höhe der Gesamtvergütung, das Verhältnis von fixer vs. variabler oder unmittelbarer vs. aufgeschobener Vergütung oder Vergütung in Form von Wertpapieren)
- Rechtsvergleich über die regulatorischen Massnahmen für die Ausgestaltung der Vergütungssysteme und deren Überwachung in ausgewählten Rechtssystemen:
  - Darstellung der regulatorischen Vorschriften
  - Beurteilung der Vor- und Nachteile der gewählten Ansätze
  - Erläuterung der Beweggründe für die Wahl des entsprechenden Ansatzes
  - Schnittstellen der regulatorischen Vorschriften zu Vergütungssystemen zu anderen Aufsichtsinstrumenten (Beispiel: Kürzung der variablen Vergütung, wenn ein Mitglied der Geschäftsleitung die «Fit and Proper»-Regeln nicht einhält)
- Zuständigkeiten (Aufgaben, Kompetenzen, Verantwortlichkeiten) der Exekutive und der Aufsichtsbehörden in Bezug auf die Höhe der Vergütung und die Ausgestaltung der Vergütungssysteme

Inhalt und Umfang

Identifikation des Handlungsbedarfs der Vergütungsregulierung in der Schweiz und Erarbeitung von Vorschlägen zu möglichen regulatorischen Anpassungen

Zu analysierende Rechtssysteme:

- UK
- USA
- EU
- Deutschland
- Kanada[35]
- Singapur
- Hongkong
- Schweiz

Zu analysierender Adressatenkreis:

[35] We excluded Canada, in agreement with the SIF, because we were not able to access the official document on bank executive pay regulation. This would create uncertainty in our analysis because we would have to rely on non-official documents only for this country. Specifically, the regulation in force "OSFI Advisory on Basel II Pillar 3 Disclosure Requirements for Remuneration" cannot be downloaded from the Canadian regulator's website. The OSFI responded to our request stating that the document "has been removed from OSFI's website as part of OSFI's web renewal project. The Government of Canada standard templates we are using are outdated and need to be replaced" and this renewal "should be completed in the next couple of months".

- Für die Analyse der Ansätze:
  - Gesamte Bankenpopulation
  - Darstellung der Unterscheidungen in Bezug auf Bankengrösse (G-SIBs, D-SIBs, andere Banken)
  - Knappe Darstellung der Regeln in Bezug auf weitere Finanzinstitute
- Für die Beurteilung, die Identifikation des Handlungsbedarfs und den Vorschlag zu regulatorischen Anpassungen:
  - Der Fokus liegt auf G-SIBs und D-SIBs
  - Der Handlungsbedarf bei anderen Banken und anderen Finanzinstituten soll knapp dargestellt werden.