

# MOBILE APPS FOR BANKING

Benchmarking – Best Practices - Strategies

NOVEMBER 2011 **MYPRIVATEBANKING** REPORT

Extract – Original Report: 228 pages plus 50 pages data appendix

# CONTENTS

1.0	EXECUTIVE SUMMARY	6
2.0	RANKING TABLE (50 BANKS)	8
3.0	HOW A WINNING BANK APP STRATEGY SHOULD LOOK	10
3.1	WHY EVERY BANK NEEDS A MOBILE APP STRATEGY	10
3.2	A WIDE FIELD: MANY TYPES OF BANK APPS BUT ONLY FEW CORE APPS	14
3.3	CRITICAL FUNCTIONS	18
3.4	RICH CONTENT	20
3.5	COMMUNICATION FUNCTIONALITY IS KEY FOR APP	22
3.6	INTEGRATING APPS IN A BANK'S ONLINE WORLD	23
3.7	USER-FRIENDLY DESIGN, NAVIGATION, SECURITY – THE WINNING FACTORS	26
3.8	THE FUTURE OF BANKING APPS	27
4.0	METHODOLOGY	29
4.1	SELECTION OF BANKS AND APPS	29
4.2	USE CASES AS GUIDELINE	31
4.3	EVALUATION PROCEDURE	32
4.4	DETERMINING THE CRITERIA	33
	AVAILABILITY OF MOBILE APPS (MAXIMUM 5 POINTS)	33
	FUNCTIONALITY FOR CLIENTS (MAXIMUM 15 POINTS)	33
	FUNCTIONALITY FOR THE GENERAL PUBLIC (MAXIMUM 6 POINTS)	34
	CONTENT FOR PUBLIC (MAXIMUM 9 POINTS)	34
	MEANS OF COMMUNICATION (MAXIMUM 5 POINTS)	34
	INTEGRATION WITH OTHER ONLINE MEDIA (	35
	NAVIGATION, STRUCTURE AND SECURITY (MAXIMUM 11 POINTS)	35
	BEST PRACTICE (MAXIMUM 3 POINTS)	35
5.0	BENCHMARKING RESULTS SUMMARIZED	36
5.1	BANKING APPS MISS OPPORTUNITIES FOR WINNING NEW CLIENTS AND SUSTAINING RELATIONSHIPS WITH EXISTING ONES	36
5.2	ANDROID AND IPAD PLATFORMS ARE NOT SUFFICIENTLY COVERED YET	37
5.3	APP FUNCTIONALITY FOR CLIENTS FOCUSED ON ACCOUNTS AND BANKING	38
5.4	GENERAL PUBLIC ARE BANKING APP ORPHANS	39
5.5	APP CONTENT – A LOT REMAINS TO BE DONE	40

5.6	ONLY BASIC MEANS OF COMMUNICATION AVAILABLE	41
5.7	LITTLE OVERALL ONLINE INTEGRATION	42
5.8	NAVIGATION AND STRUCTURE MOSTLY GOOD BUT SECURITY WEAK	43
5.9	APPS FOCUS ON BANKING AND ENTERTAINMENT, WEAK IN INFORMATION AND BROKERAGE	44
<b>6.0</b>	<b>BEST STAND-ALONE BANKING APPS</b>	<b>45</b>
	BANK OF CHINA APPS, SCREENSHOTS	46
<b>7.0</b>	<b>PROFILES OF BANK APP STRATEGIES</b>	<b>47</b>
7.1	ABN AMRO	47
7.2	ANZ BANK	51
7.3	BANCO BILBAO V.A.	54
7.4	BANK OF AMERICA	58
7.5	BANK OF CHINA	61
7.6	BANK OF MONTRAL	64
7.7	BARCLAYS	68
7.8	BB&T	71
7.9	BNP PARIBAS	75
7.10	BNY MELLON	79
7.11	BRADESCO	82
7.12	CAISSE D'EPARGNE	86
7.13	CIBC	90
7.14	CITI BANK	94
7.15	CLARIDEN LEU	97
7.16	COMMERZBANK	100
7.17	CRÉDIT AGRICOLE	103
7.18	CREDIT SUISSE	107
7.19	DANSKE BANK GROUP	110
7.20	DBS BANK	113
7.21	DEUTSCHE BANK	117
7.22	DEXIA	120
7.23	ERSTE BANK/SPARKASSE ÖSTERREICH	123
7.24	HSBC	126
7.25	ING BANK	129
7.26	INTESA SANPAOLO	132

7.27	ITÁU BANK	135
7.28	J.P. MORGAN	138
7.29	KOTAK MAHINDRA BANK	141
7.30	MERRILL LYNCH	144
7.31	MITSUBISHI UFJ SECURITIES INTERNATIONAL	147
7.32	NATIONAL AUSTRALIA BANK	150
7.33	NORDEA	153
7.34	PNC FINANCIAL GROUP	156
7.35	POSTBANK	159
7.36	RABOBANK GROUP	162
7.37	ROYAL BANK OF CANADA	165
7.38	ROYAL BANK OF SCOTLAND	168
7.39	SANTANDER	171
7.40	SEB BANK	174
7.41	SOCIÉTÉ GÉNÉRALE	177
7.42	SPARKASSE	180
7.43	STANDARD CHARTERED	184
7.44	SUNTRUST	187
7.45	TORONTO DOMINION	190
7.46	UBS	193
7.47	UNICREDIT	196
7.48	VOLKSBANK	199
7.49	VONTOBEL BANK	202
7.50	WELLS FARGO	205
<hr/>		
8.0	TOP 20 MOBILE APPLICATIONS FEATURES	208
8.1	ALL-IN-ONE INFORMATION FOR EMERGENCIES (ABN AMRO)	208
8.2	PROPERTY SEARCH, SELECTION AND FINANCING ON THE GO (ANZ)	209
8.3	SPECIAL SUPPORT FOR PARTICULAR NEEDS (BRADESCO)	210
8.4	GET CONNECTED ACROSS THE VIRTUAL UNIVERSE (DEUTSCHE BANK)	211
8.5	TRAVEL WITH YOUR BANK IN YOUR POCKET (BNP PARIBAS)	212
8.6	MULTIMEDIAL CLIENT MAGAZINES THAT DON'T END UP IN THE TRASH(UBS)	213
8.7	EXTENSIVE GLOSSARIES, EASY-TO-USE (COMMERZBANK)	214
8.8	HELP FUNCTIONS THAT DON'T REQUIRE HELP TO BE UNDERSTOOD (BBVA)	215
8.9	HIGH-QUALITY RESEARCH FOR EVERYONE (ERSTE SPARKASSE)	216

8.10	EDUCATION THAT'S FUN TO FOLLOW (CREDIT SUISSE)	217
8.11	PAY AT YOUR FINGERTIPS (RABOBANK)	218
8.12	A VIRTUAL WALLET SUPPORTING THE REAL WALLET (PNC)	219
8.13	A COOL MIX FOR THE CLIENTS OF TOMORROW (BRADESCO)	220
8.14	MONEY DEPOSIT BY A SINGLE CLICK (PNC)	221
8.15	BRANCH LOCATION DE LUX (CIBC)	222
8.16	PAY BY BUMP (ING DIRECT)	223
8.17	COMPARE YOUR SPENDING WITH OTHERS (CITIBANK)	224
8.18	ALERTS THAT SAVE MONEY (BMO)	225
8.19	COMMUNITIES IN YOUR HAND (BMO)	226
8.20	INFORMATION AND ENTERTAINMENT ON THE GO (CAISSE D'EPARGNE)	227

# 1.0 EXECUTIVE SUMMARY

---

« The mobile app revolution has reached the banking industry. But it is still at a very immature stage. This – in a nutshell – is the outcome of our benchmarking analysis of a total of almost 200 apps for private clients, offered by 50 leading global banks. »

The mobile app revolution has reached the banking industry. But it is still at a very immature stage. This – in a nutshell – is the outcome of our benchmarking analysis of a total of almost 200 apps for private clients, offered by 50 leading global banks. Currently, about two thirds of the banks analyzed offer only very basic banking apps with limited functionality and little content. Only a handful of banks, like the winners of the ranking Caisse d'Épargne (France) and Deutsche Bank (Germany), can claim that they have a comprehensive and user-friendly portfolio of financial apps for private clients. Bank of China offers the single best banking app.

The biggest shortcomings in the app strategy of most banks are:

- **Most banking apps are only available for iPhone** (Apple iOS). There is a serious lack of specific apps for iPad and, even worse, many banks are reluctant to offer Android versions of their apps. (...)
- **Banking apps offer only basic functionality.** Only 65% of banks offer market information apps to their clients and 40% of banks provide apps with brokerage functionality for trading stocks and other securities. (...)
- **Bank apps don't do a lot to attract users who are non-clients.** Apps are potentially a great marketing tool for acquiring new clients. But the majority of banks seem disinclined to open their apps to the public. (...)
- **Banking apps provide little useful content.** Less than half of the banks offer product information or financial news on their apps. Video content and digital client magazines are hardly offered at all. (...)
- **Security and privacy are weak spots.** Many banking apps do not offer the same level of security as regular online banking via the Internet. Privacy information is also conspicuously absent from most apps. (...)

Overall the verdict of this report is that a large majority of banks are not yet harnessing the potential of apps to engage clients, market their products, strengthen their brands and provide more corporate information.

The winners of our benchmarking, Caisse d'Épargne and Deutsche Bank, for their feature-rich portfolio of apps, and Bank of China, for the single best banking app, show how important a comprehensive, strategic approach to app development is:

- **Apps on a stand-alone basis as well as a portfolio of apps must have a clear strategic focus.** For each app it has to be clear which client or user requirements it should satisfy. (...)
- **Banking, brokerage, corporate information and a digital client magazine are must-haves for a banking app portfolio.** (...) All these features should be concentrated in a limited number of apps and should complement the offerings on other channels such as websites and social media to form a coherent digital strategy.
- **A bank should concentrate its efforts and set priorities.** Good execution of an app strategy requires a clear determination of the objective, resources and timeline from the outset. (...).
- **International banks must think globally about their app strategy.** Apps should be consistent in branding, security and convenience across different markets worldwide, but also capable of catering to local differences where necessary. (...)

Today, we are seeing only the very beginnings of the mobile app revolution. Soon users of online media will spend more time with apps on their smartphones or pads than on the fixed or PC-based Internet. The challenge for banks will be to offer, across multiple access channels, a platform that allows clients and others to bank, transact, trade and be entertained wherever and whenever they wish. Therefore, personal interaction, telephone, online banking and mobile media will increasingly merge into a unified service platform. (...)

Apps are not a gimmick, but a game changer. Banks that miss out will lose.

## 2.0 RANKING TABLE (50 BANKS)

Banks	Total (max 60 points)	Availability on platforms (6)	Functionality for clients (15)	Functionality for public (6)	Content (9)	Means of communication (5)	Integration with other online media (5)	Navigation, structure, security (11)	Best practices (3)
1 Caisse d'Epargne	50	...	...	...	...	...	...	...	...
1 Deutsche Bank	50	...	...	...	...	...	...	...	...
3 Bradesco	49	...	...	...	...	...	...	...	...
4 DBS Bank	47	...	...	...	...	...	...	...	...
4 ING Groep	47	...	...	...	...	...	...	...	...
6 Citibank	46	...	...	...	...	...	...	...	...
6 Société Générale	46	...	...	...	...	...	...	...	...
8 UniCredit	45	...	...	...	...	...	...	...	...
9 Banco Bilbao Viz. Arg.	44	...	...	...	...	...	...	...	...
9 Credit Agricole	44	...	...	...	...	...	...	...	...
9 ...	44	6	11	4	7	3	3	10	0
9 ...	44	5	12	5	2	3	5	11	1
9 ...	44	5	14	3	5	3	3	10	1
14 ...	43	4	12	3	9	2	3	9	1
15 ...	42	5	13	4	4	3	3	9	1
15 ...	42	6	11	4	9	2	2	8	0
17 ...	41	5	10	4	7	2	2	10	1
18 ...	40	5	11	2	4	3	3	11	1
18 ...	40	4	13	5	4	3	2	9	0
20 ...	39	6	8	5	4	2	4	10	0
20 ...	39	5	11	5	4	3	2	8	1
22 ...	38	6	14	5	2	2	3	5	1
22 ...	38	4	12	2	5	2	3	9	1
24 ...	37	5	11	4	3	2	5	6	1
24 ...	37	3	8	3	9	1	2	9	2
24 ...	37	6	7	3	5	3	3	9	1
27 ...	36	5	9	3	2	3	3	9	2
27 ...	36	6	12	3	5	2	1	7	0
29 ...	35	6	8	4	1	2	2	11	1
29 ...	35	5	12	2	4	2	1	9	0
29 ...	35	6	8	2	3	3	5	8	0

(continued on next page rank 32-49)

Banks	Total (max 60 points)	Availa- bility on platforms (6)	Function- ality for clients (15)	Function- ality for public (6)	Content (9)	Means of communi- cation (5)	Inte- gration with other online media (5)	Navi- gation, structure, security (11)	Best practices (3)
32 ...	34	4	4	3	8	3	3	8	1
33 ...	32	6	14	3	1	1	2	5	0
34 ...	31	5	7	2	1	4	4	8	0
34 ...	31	4	7	2	3	3	3	8	1
34 ...	31	5	10	2	2	2	2	8	0
37 ...	30	5	8	4	1	1	2	8	1
38 ...	28	4	7	3	1	2	2	9	0
39 ...	27	2	12	0	3	2	1	7	0
39 ...	27	3	9	0	1	3	1	10	0
41 ...	25	3	5	1	6	2	1	7	0
41 ...	25	5	7	2	1	1	1	8	0
43 ...	24	5	7	2	0	1	2	7	0
43 ...	24	5	9	2	0	0	1	7	0
43 ...	24	3	10	0	0	2	3	6	0
46 ...	22	5	5	2	1	1	1	7	0
47 ...	18	4	6	1	1	0	1	5	0
47 ...	18	3	0	0	5	2	2	6	0
49 ...	16	1	7	0	1	1	0	6	0
49 ...	16	4	2	0	1	0	3	6	0

#### All Banks Analyzed:

ABN Amro, ANZ Bank, BBVA, Bank of China, Bank of Montreal, BNY Mellon, Barclays, BB&T, BNP Paribas, BofA, Bradesco, Caisse d'Epargne, CIBC, Citibank, Clariden Leu, Commerzbank, Credit Agricole, Credit Suisse, Danske Bank, DBS Bank, Deutsche Bank, Dexia, Erste Bank, HSBC, ING, Intesa Sanpaolo, Itau Unibanco, J.P. Morgan, Kotak Mahindra Bank, Merrill Lynch, Mitsubishi UFJ Financial Group, National Australia, Nordea, PNC, Postbank Deutschland, Rabobank Group, Royal Bank of Canada, Royal Bank of Scotland, Santander, SEB, Société Générale, Sparkasse Deutschland, Standard Chartered, Suntrust, Toronto Dominion, UBS, UniCredit, Volksbank Deutschland, Vontobel, Wells Fargo

## 3.0 METHODOLOGY

---

### 3.1 SELECTION OF BANKS AND APPS

This study analyzes the apps of 50 leading global banks that serve private clients and offered apps for their private clients (some banks did not provide apps at all and were therefore removed from the analysis). The group of the 50 providers that were analyzed includes the 35 biggest banks for private clients worldwide (provided they offered apps), ranked by total assets under management. The remaining 15 banks are banks and wealth managers that don't have such a strong global presence, but are among the leading providers in their national or regional markets.

For all banks all mobile apps on the Apple, Android, BlackBerry and Windows Mobile platforms were identified globally. Only apps that were targeted at private clients were included in the benchmarking analysis.

One app was determined as the "primary app". In principle, this app was the main banking app for the home market of the bank. For instance, for Deutsche Bank the app "Meine Bank", targeted at German clients, was chosen as primary app. In cases where there was no banking app for the home market another relevant app for the home market was chosen as primary app or, if none such existed, a banking app from one of the bank's other core markets became primary app. In each profile the primary app is highlighted

Besides the primary app other apps of the bank were also included in the analysis if they met the following criteria:

- App was available for home market or one of the other core markets where the bank had a significant presence.
- App had at least some relevance for the financial business of the bank.

In a first step the primary app was analyzed and rated using our list of 46 criteria (detailed explanation of the criteria see below, chapter 4.2.). A perfect app could score a maximum of 60 points.

If the primary app did not reach the maximum number of points (none did), all other relevant apps were included in the next stage of the analysis. In this process a bank could gain additional points against those criteria where the primary app had not reached the maximum number of points. In this way, other apps could contribute to the overall score by a bank, up to the maximum of 60 points.

We choose this method to account for the fact that some banks had comprehensive apps covering many different functions (e.g. banking, brokerage, ATM search etc.) but other banks employ many different apps, in extreme cases providing one app for every single function (one app for ATM search, one for currency conversion, one for account status etc.). To be fair to both approaches we included all available and relevant apps for every bank in the ranking.

Since some banks provided excellent apps outside of their home market, we chose to include apps in other country markets than the home market of the banks as well. This allowed us to include many more good or excellent apps in our analysis.

Throughout, it was important for us not to view only the collection of single apps a bank offers to clients and public but to take into account the overall app strategy of a bank.

In many cases, banking and brokerage apps were only accessible with specific log-in credentials. We have contacted all banks for whom we did not possess log-in credentials via email in order to get access to a test (sample) account. Some of the banks actually offered a test (sample) account within their app for non-clients to test-drive their functionality.

In some cases it was not possible for our analysts to test the full functionality of an app as there was no response to our request for log-in credentials from some banks. In these cases we have evaluated the functionality of the app that was behind the log-in wall based on the app description, user feedback in the various app stores and screen shots of the app from various sources.

### 3.2 USE CASES AS GUIDELINE

Prior to the analysis of the apps, MyPrivateBanking Research conducted 20 qualitative, in-depth interviews with banking clients and app users. Based on these interviews five core use cases were developed.

The term 'Use case' originated as a software and systems engineering term to signify the actions a user must take to achieve a specific result. The term can also be applied to user interfaces in website tests and comparisons. By use case we mean a typical scenario of how and why certain user groups use the app. We have derived our detailed evaluation criteria and their weightings directly from these use cases:

Use Case	User Group	Objective
<b>Banking or brokerage transaction</b>	Existing clients	Account status look-up, payment, money transfer, portfolio status, trading
<b>Search for financial information</b>	Existing clients, potential new clients, general public	Look-up of market data, quotes, financial news, background research, currency conversion
<b>Search for contact or local information</b>	Existing clients, potential new clients	Mapping data for ATMs/branch offices. Contact data of specific branches and services (e.g. while traveling)
<b>Search for information about bank including products and services</b>	General public, journalists, job applicants, suppliers	Looking for specific information about the bank like corporate info, job info or more general info about specific products like credits, mortgage, savings products etc.
<b>Infotainment</b>	All possible client groups and stakeholders	Gaming, social networking, entertainment, finding information and having fun at same time

### 3.3 EVALUATION PROCEDURE

Every app was analyzed by two analysts, independently of each other and the analysis and evaluation was repeated after an interval of six weeks. This was done to minimize the probability of wrong evaluations due to a purely subjective point of view and accidental network problems at a certain point in time. Given the quantity of information that had to be analyzed, the possibility of not finding all the information in individual cases cannot be ruled out. The evaluation was done on the basis of 46 different criteria that were divided into eight categories. Care was taken to keep the definition and allocation of points as free as possible from all subjective influences, thus ensuring a high level of objectivity in the benchmarking process.

In addition to the apps themselves, other sources of information were also included in the analysis: user feedback and ratings in the appstores (Apple, Android), information from the website of the banks (often the banks displayed additional information about their apps on the website such as privacy policy, FAQs or a video tutorial), occasionally also other sources like Twitter feeds, blogs etc. were included.

### 3.4 DETERMINING THE CRITERIA

In this study, the main evaluation criterion for the apps is the extent to which they fulfill the use cases described above, from the point of view of various user segments. We measured usability in terms of the eight overarching parameters:

- Availability of mobile apps
- Functionality for clients
- Functionality for the general public
- Content
- Means of communication
- Integration with other online media
- Navigation, structure and security
- Best practices

The following contain the descriptions of these parameters with the detailed criteria and maximum achievable points.

#### **Availability of mobile apps (maximum 5 points)**

- Mobile app available for iPhone (1 point)
- Mobile app available for iPad (1 point)
- Mobile app available for Android devices (1 point)
- Availability of further operating systems or other mobile services : E.g. BlackBerry, SMS etc. (1 point)
- App provides open functionality/service for general public (1 point for at least one public function such as currency converter, 2 points for more than one function)

#### **Functionality for clients (maximum 15 points)**

- Financial status: Overview of accounts, history of transactions (2 points)
- Online banking: bill payments and money transfer (2 points)
- Brokerage: Security trading, portfolio overview, portfolio analysis (2 points)
- Market information: stock quotes, overview of indexes, other market data, delayed or real-time (2 points)
- Credit card account: Overview of account, history of transactions (2 points)
- Research library: availability of analyst reports/calls (1 point)

- Special offers for clients: loyalty program, shopping deals (1 point)
- Help functions: FAQs, video tutorial, comprehensive description of app (1 point)
- Direct contact to personal financial advisor: direct phone line, email or messaging
- Customization: watchlist, text/sms-alerts, push functions etc. ( 1point)

#### **Functionality for the general public (maximum 6 points)**

- Branch and ATM finder (1 point for ATM finder, 1 point for branch finder, for both functions 2 points)
- Financial planning/advisory tools: e.g. mortgage calculator (1 point for 1 tool, 2 points for more than one)
- Currency converter (1 point)
- Demo account (1 point)

#### **Content for public (maximum 9 points)**

- General information: company information, management board, other corporate information ( 2 points)
- Product and service information: description of products and services the bank offers (2 points)
- Periodical customer magazine: this can be a fully-fledged magazine with editorial content, a newsletter or even – at minimum - just a blog (1 point)
- Video or audio content: as the use of video and audio content becomes more and more attractive, these media must be used (1 point)
- Market information: e.g. stock quotes, index quotes (1 point)
- Financial news (1 point)
- FAQs, help functions, tutorials etc. ( 1point)

#### **Means of communication (maximum 5 points)**

- Email address or messaging form (1 point)
- Live chat with customer support (1 point)
- Call back functionality: e.g. a call back button (1 point)
- Phone numbers: including toll-free numbers or regular numbers (1 point)
- Feedback function: This can be a feedback button that links to the appstore, comment function, feedback through Facebook etc. ( 1 point)

**Integration with other online media (**

- Backlink to own website ( 1point)
- Other weblinks of interest: other relevant websites or own website (1 point)
- Information on own website regarding mobile apps (1 point)
- Link to own Facebook presence (1 point)
- Link to own Twitter presence (1 point)

**Navigation, structure and security (maximum 11 points)**

- Easy and simple navigation: maximum of two clicks to reach every feature in app (1 point)
- Clear menu on entry screen (1 point)
- Convergence app for iPhone/iPad (1 point)
- Application works with reasonable stability (1 point)
- Customization of app for different languages (1 point)
- Privacy information: available within app (1 point)
- Security:
  - protection of log-in credentials (no automatic saving of passwords or user names, 1 point);
  - log-in procedure that uses stronger security measures than just simple username and PIN/password ( 1point);
  - encryption of sensitive information (min. 128 bit SSL or similar, 1 point)
- Adequate description of app in appstore: comprehensive description of functions and instructive screenshots (1 point)
- App is up-to-date: most recent version not older than six months (1 point)

**Best practice (maximum 3 points)**

Each bank could earn up to 3 points for best practices. As the development of apps is very fluid and new ideas are developed and tried out quickly, it was important to give credit to the banks with advanced features and new, challenging ideas. For every feature that our analysts found particularly innovative or user friendly a participant could earn 1 point. Up to three best practices per bank were permitted in the rating.

## 4.0 DISCLAIMERS

---

### **No Investment Advice**

This report is not an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. This report is distributed for informational purposes only and should not be construed as investment advice or a recommendation to sell or buy any security or other investment, or undertake any investment strategy. It does not constitute a general or personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual investors. The price and value of securities referred to in this report will fluctuate. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of all of the original capital invested in a security discussed in this report may occur. Certain transactions, including those involving futures, options, and other derivatives, give rise to substantial risk and are not suitable for all investors.

### **Disclaimers**

There are no warranties, expressed or implied, as to the accuracy, completeness, or results obtained from any information set forth in this report. MyPrivateBanking GmbH will not be liable to you or anyone else for any loss or injury resulting directly or indirectly from the use of the information contained in this report, caused in whole or in part by its negligence in compiling, interpreting, reporting or delivering the content in this report.

### **Copyright**

MyPrivateBanking GmbH's Products are the property of MyPrivateBanking GmbH, Switzerland, and are protected by Swiss and international copyright law and other intellectual property laws. Customers are prohibited to copy, forward or store MyPrivateBanking Products outside of the legal entity that has made the purchase.

© MyPrivateBanking GmbH 2011. All rights reserved.