

Appendices

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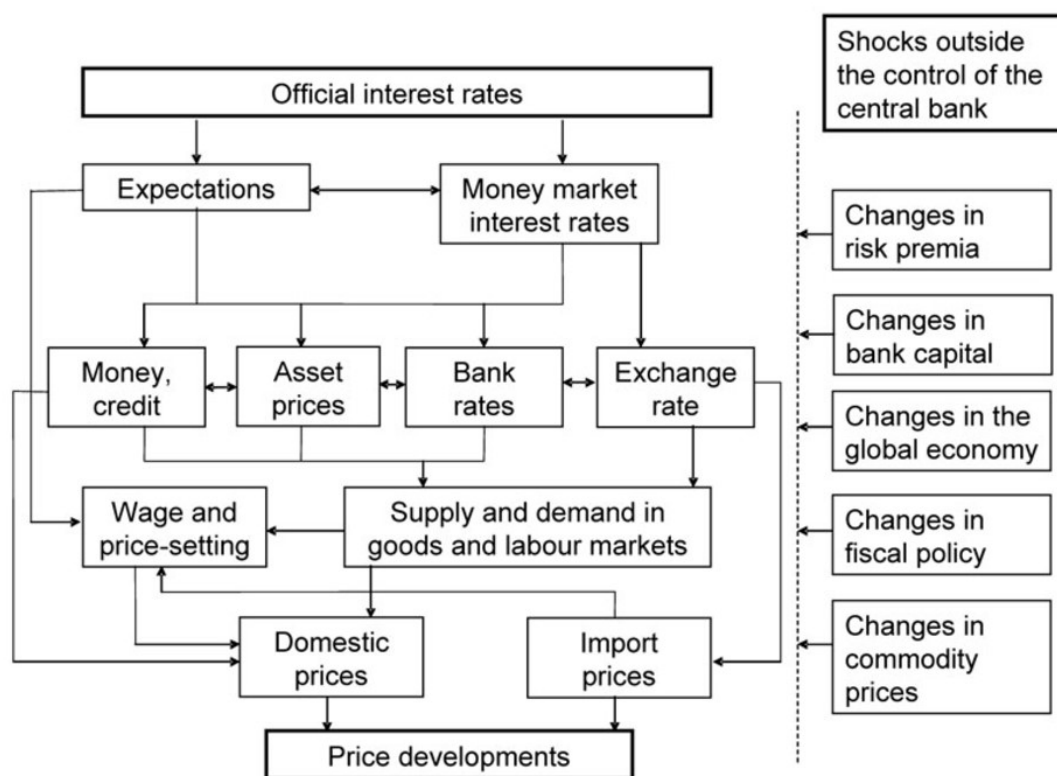
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Appendix 1: The Stamp Scrip



Source: Gatch (2009)

Appendix 2: Transmission Mechanism of Monetary Policy



Source: ECB (2017a)

Appendix 3: Table of the Variables Used

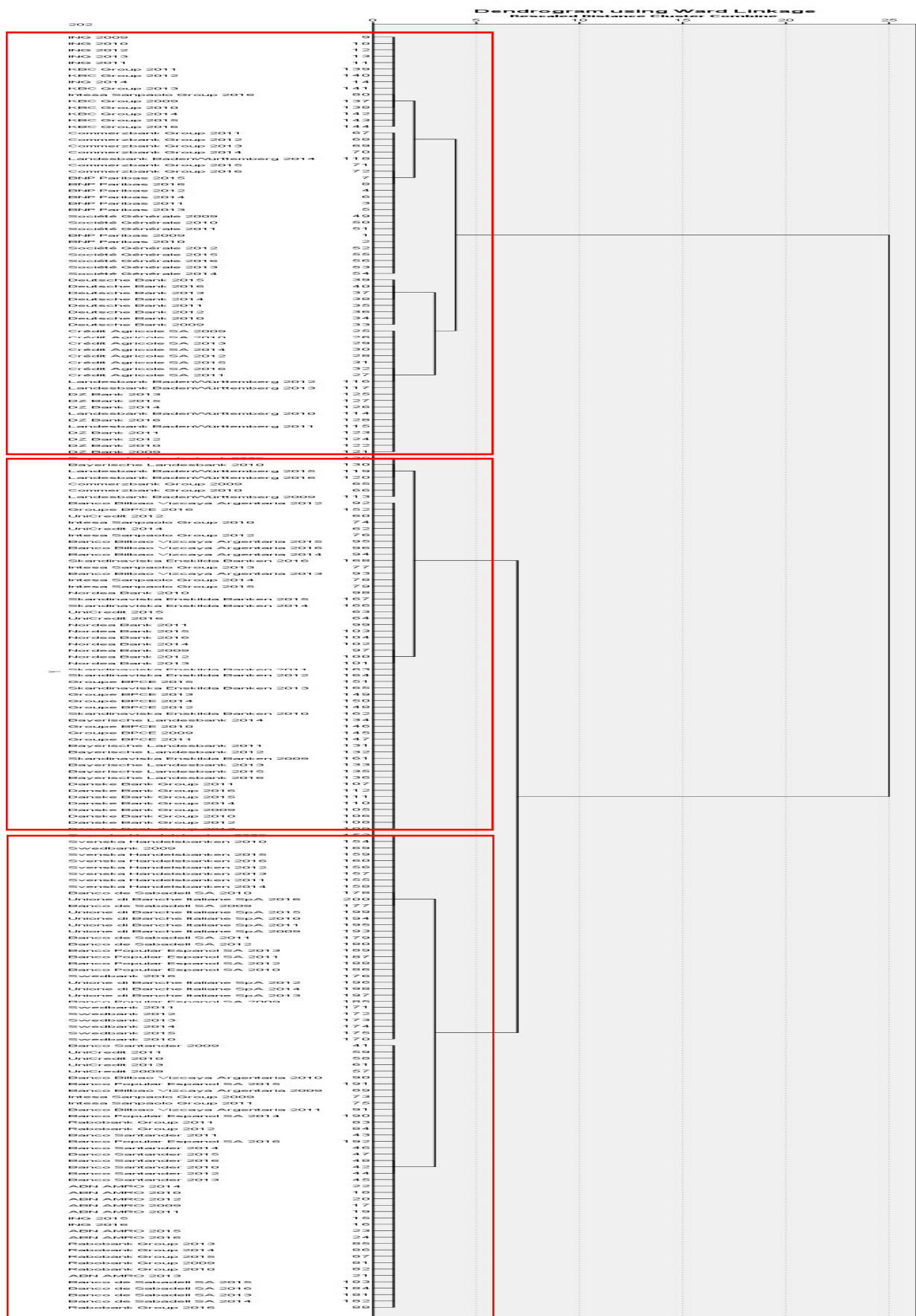
	Name	Description	SPSS Shortcut
1	Banks	Name of the bank with its corresponding observation year	Banks
2	Date		Date
3	Total assets		TotalAssets
4	Total loans		TotalLoans
5	Total equity		TotalEquity
6	Common-sized total loans	Total loans of a banks as a percentage of its total assets (Total loans/Total assets)	LoanstoAssets
7	Common-sized total equity	Total equity of a banks as a percentage of its total assets (Total equity/Total assets)	EquitytoAssets
8	Long-term debt	Long term borrowings	LTDebt
9	Short-term debt	Short term borrowings and repo	STDebt&Repo
10	Wholesale Debt	Sum of the Long-term debt and the Short-term debt (Roengpitya et al., 2014)	WholesaleDebt
11	Common-sized wholesale debt	Wholesale debt of a bank as a percentage of its total assets	WholesaletoAssets
12	Total customer deposits		TotalCustomerDeposits
13	Common-sized customer deposits	Total customer deposits of a bank as a percentage of its total assets	TotalCustomerDeposittoAssets
14	Stable funding	Sum of the Long-term debt, the Short-term debt and the total customer deposits (Roengpitya et al., 2014)	StableFunding
15	Common-sized stable funding	Stable funding of a bank as a percentage of its total assets	StableFundingtoAssets
16	Cash and deposits	Cash and deposits at the central bank	CashandDeposits
17	Intangible assets		IntangibleAssets
18	Trading assets		TradingAssets
19	Interbank lending		LoanstoBanks
20	Common-sized Interbank lending	Interbank lending of a bank as a percentage of its total assets	InterbankLendingtoAssets
21	Net income		NetIncome
22	Return on equity		RoE
23	Return on assets		RoA
24	Net interest income		NetInterestIncome
25	Non-interest income		NonInterestIncome

26	Non-interest expenses		NonInterestExpenses
27	Interest income		InterestIncome
28	Net trading income		TradingIncome
29	Net fee and commission income		Fees&CommissionsIncome
30	Net other income		OtherIncome
31	Total operating income	Sum of the net interest income, the net trading income, the net fee and commission income and the net other income	OPIIncome
32	Cost-to-income ratio	(Non-interest expenses)/(Net interest income + non-interest income)	CostToIncome
33	Clustering	Results of the Ward method: 1 = investment bank, 2 = retail bank, 3 = wholesale bank	CLU3_1
34	Period	Variable allowing to differentiate observations taken prior to the introduction of the negation and after: 1 = prior, 2 = after	Period

Appendix 4a: Calinski & Harabasz Pseudo-F Index

Number of cluserts	Pseudo-F Index	Number of clusters	Pseudo-F Index
2	402.5	7	365.4
3	496.2	8	377.6
4	401.0	9	354.7
5	399.8	10	352.5
6	371.7	11	351.2

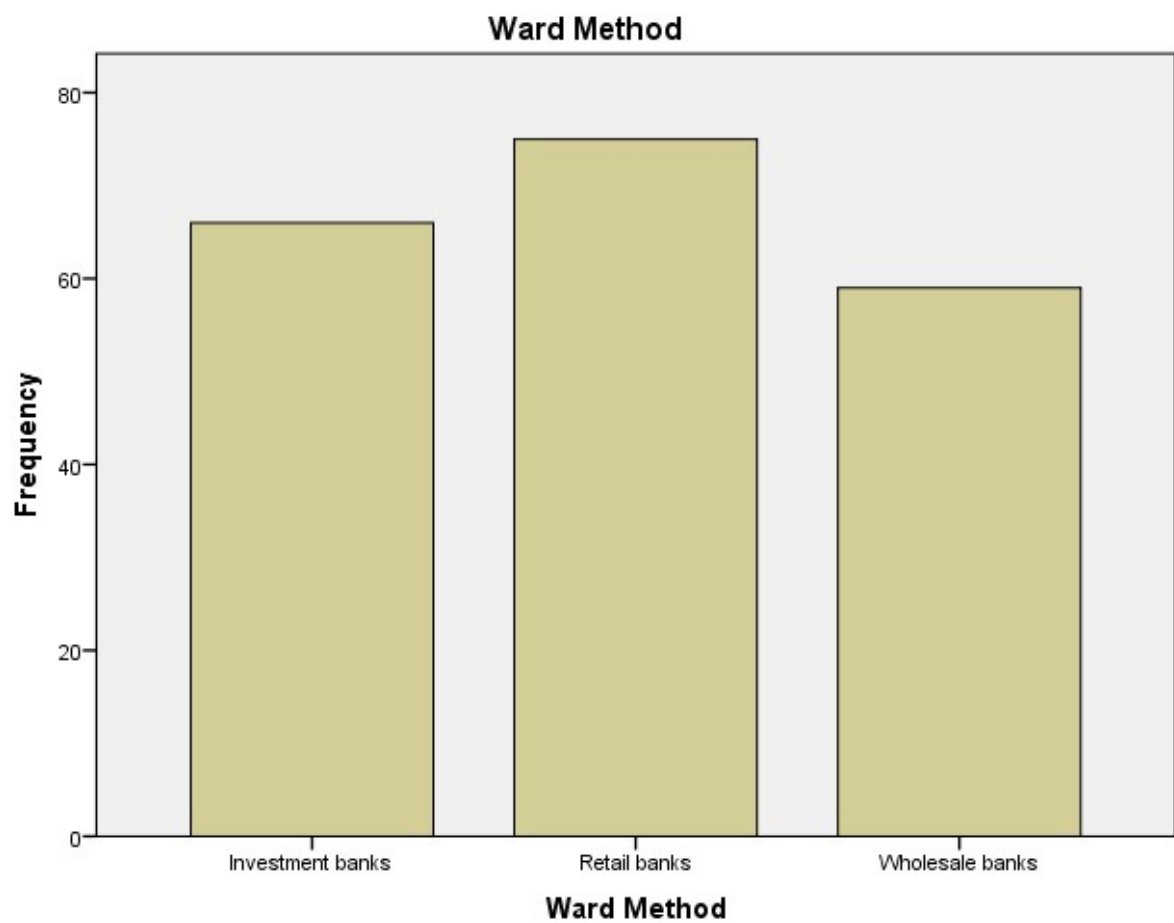
Notes: The higher the Pseudo-F Index value is, the better the sample is clustered



Appendix 5: Business Models' Frequency

Ward Method

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Investment banks	66	33,0	33,0	33,0
	Retail banks	75	37,5	37,5	70,5
	Wholesale banks	59	29,5	29,5	100,0
	Total	200	100,0	100,0	



Appendix 6: Assignment of Banks to a Defined Business Model/Cluster

Retail banks	Investment banks	Wholesale banks
ABN AMRO	BNP Paribas	BBVA (2013-2016)
BBVA (2009-2011)	Commerzbank	Bayerische Landesbank
Banco de Sabadell	Crédit Agricole	Commerzbank (2009-2010)
Banco Popular Espanol	Deutsche Bank	Danske Bank
Banco Santander	DZ Bank	Groupe BPCE
ING (2015-2016)	ING	Intesa Sanpaolo
Intesa Sanpaolo (2009, 2011)	KBC Group	Landesbank
Rabobank Group	Société Générale	BadenWürttemberg
		Nordea Bank
		Skandinaviska
Svenska Handelsbanken		Enskilda
Swedbank		Banken
UniCredit		
Unione di Banche Italiane		

Appendix 7: Banks' Descriptive Variables (on total assets)

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Loans to Assets	200	,1742215446	,8179258100	,5291019867	,1561865364
Trading Assets to Total Assets	200	,1313254169	,8127742119	,4294957502	,1644811084
Wholesale to Assets	200	,1483054691	,6845836957	,3870711585	,1110008197
Interbank Lending to Assets	200	,0015633080	,3970565746	,0792752275	,0679279452
Equity to Assets	200	,0231680310	,1009669249	,0525887616	,0154367623
Valid N (listwise)	200				

Appendix 8a: Business Models' Total Assets

Descriptive Statistics						
Ward Method		N	Minimum	Maximum	Mean	Std. Deviation
Investment banks	Total Assets	66	238686,0000	2164103,000	1071060,091	639023,0907
	Valid N (listwise)	66				
Retail banks	Total Assets	75	82822,88600	1340260,000	451669,7932	368208,4769
	Valid N (listwise)	75				
Wholesale banks	Total Assets	59	212150,0000	1235240,000	585047,5453	297909,6428
	Valid N (listwise)	59				

Appendix 8b: Business Models' Descriptive Variables (on total assets)

		Descriptive Statistics				
Ward Method		N	Minimum	Maximum	Mean	Std. Deviation
Investment banks	Loans to Assets	66	,1742215446	,5341501688	,3530774653	,1026901093
	Trading Assets to Total Assets	66	,4173764535	,8127742119	,6138929139	,1042142467
	Wholesale to Assets	66	,1483054691	,5343308214	,3165259262	,1050992512
	Interbank Lending to Assets	66	,0015633080	,3970565746	,1079701677	,0953966418
	Equity to Assets	66	,0252575779	,0680168253	,0431827149	,0114467975
	Valid N (listwise)	66				
Retail banks	Loans to Assets	75	,5864319471	,8179258100	,6822522157	,0529942248
	Trading Assets to Total Assets	75	,1313254169	,3534552213	,2646425545	,0521516544
	Wholesale to Assets	75	,2182747681	,6133764956	,4061609070	,0965175916
	Interbank Lending to Assets	75	,0119299888	,1515239126	,0494596377	,0252750831
	Equity to Assets	75	,0231680310	,1009669249	,0612586191	,0153321540
	Valid N (listwise)	75				
Wholesale banks	Loans to Assets	59	,3634568393	,6352109357	,5313282789	,0519926217
	Trading Assets to Total Assets	59	,3536689012	,6304561155	,4327801040	,0577623210
	Wholesale to Assets	59	,2907574462	,6845836957	,4417195346	,0940091539
	Interbank Lending to Assets	59	,0146607132	,2201949129	,0850769763	,0519311130
	Equity to Assets	59	,0255651042	,0828833697	,0520897747	,0131415063
	Valid N (listwise)	59				

Appendix 8c: Business Models' Customer Deposits (on total assets)

		Descriptive Statistics				
Ward Method		N	Minimum	Maximum	Mean	Std. Deviation
Investment banks	Total Customer Deposit to Assets	66	,1477983965	,5768422965	,3237898103	,0940005865
	Valid N (listwise)	66				
Retail banks	Total Customer Deposit to Assets	75	,2521487976	,6607831219	,4410606532	,1013940740
	Valid N (listwise)	75				
Wholesale banks	Total Customer Deposit to Assets	59	,1797572955	,5301248610	,3327538917	,0750423412
	Valid N (listwise)	59				

Appendix 8d: Business Models' Return on Equity Evolution (in %, 2009-2016)

		Descriptive Statistics					
Ward Method	Date		N	Minimum	Maximum	Mean	Std. Deviation
Investment banks	2009	RoE	7	-20,6593000	14,76760000	1,013757143	11,46077469
		Valid N (listwise)	7				
	2010	RoE	8	-3,54270000	13,90200000	7,133125000	5,759938612
		Valid N (listwise)	8				
	2011	RoE	9	-6,28650000	8,882400000	3,643844444	5,549739311
		Valid N (listwise)	9				
	2012	RoE	9	-16,3856000	9,636000000	1,229266667	7,894661107
		Valid N (listwise)	9				
	2013	RoE	9	,3308000000	13,51600000	4,785566667	3,883293893
		Valid N (listwise)	9				
	2014	RoE	9	-,101400000	15,54780000	4,861166667	5,180257036
		Valid N (listwise)	9				
	2015	RoE	7	-10,7182000	11,52710000	5,019885714	7,386013971
		Valid N (listwise)	7				
	2016	RoE	8	-2,73930000	15,64150000	6,063775000	5,421522380
		Valid N (listwise)	8				
Retail banks	2009	RoE	10	-12,2729000	15,32130000	6,846430000	8,103930473
		Valid N (listwise)	10				
	2010	RoE	10	-4,00350000	14,12470000	6,802520000	5,586819263
		Valid N (listwise)	10				
	2011	RoE	11	-18,4907000	13,47400000	1,050136364	11,85319383
		Valid N (listwise)	11				
	2012	RoE	8	-27,0539000	14,15220000	2,531875000	13,06853818
		Valid N (listwise)	8				
	2013	RoE	9	-25,5052000	13,28620000	2,720522222	11,32233560
		Valid N (listwise)	9				
	2014	RoE	8	-7,20600000	14,50720000	5,821250000	6,737144880
		Valid N (listwise)	8				
	2015	RoE	9	,8385000000	13,08590000	7,359711111	4,606248276
		Valid N (listwise)	9				
	2016	RoE	9	-29,5697000	15,46550000	2,908344444	13,94498679
		Valid N (listwise)	9				
Wholesale banks	2009	RoE	6	-45,6553000	11,55120000	-14,6588000	22,78595052
		Valid N (listwise)	6				
	2010	RoE	7	3,565000000	14,64940000	7,723271429	3,995856182
		Valid N (listwise)	7				
	2011	RoE	5	,8993000000	10,72490000	5,864000000	4,692722940
		Valid N (listwise)	5				
	2012	RoE	8	1,513900000	11,54460000	5,628850000	3,648682604
		Valid N (listwise)	8				
	2013	RoE	7	-9,66720000	12,72240000	4,364557143	7,350545822
		Valid N (listwise)	7				
	2014	RoE	8	-9,90810000	14,93680000	4,634512500	7,286621309
		Valid N (listwise)	8				
	2015	RoE	9	3,166200000	12,03300000	6,729011111	3,366076511
		Valid N (listwise)	9				
	2016	RoE	8	-26,3695000	12,72100000	3,094337500	12,53928585
		Valid N (listwise)	8				

Appendix 8e: Business Models' Return on Assets Evolution (in %, 2009-2016)

Descriptive Statistics							
Ward Method	Date		N	Minimum	Maximum	Mean	Std. Deviation
Investment banks	2009	RoA	7	-,725800000	,2822000000	-,011985714	,3398868117
		Valid N (listwise)	7				
	2010	RoA	8	-,092300000	,5767000000	,2385000000	,2060654542
		Valid N (listwise)	8				
	2011	RoA	9	-,088600000	,4576000000	,1461111111	,1676042470
		Valid N (listwise)	9				
	2012	RoA	9	-,382500000	,3402000000	,0972555556	,2204449597
		Valid N (listwise)	9				
	2013	RoA	9	,0137000000	,4096000000	,1962888889	,1331049064
		Valid N (listwise)	9				
	2014	RoA	9	,0081000000	,7287000000	,2188555556	,2273941848
		Valid N (listwise)	9				
	2015	RoA	7	-,407100000	1,060800000	,2941000000	,4277135412
		Valid N (listwise)	7				
	2016	RoA	8	-,087100000	,9201000000	,3184250000	,2985050885
		Valid N (listwise)	8				
Retail banks	2009	RoA	10	-,582900000	,8280000000	,3967100000	,4088826657
		Valid N (listwise)	10				
	2010	RoA	10	-,109200000	,8468000000	,3961700000	,2797992179
		Valid N (listwise)	10				
	2011	RoA	11	-1,41460000	,6574000000	-,034681818	,7808056542
		Valid N (listwise)	11				
	2012	RoA	8	-1,70580000	,7724000000	,0635125000	,7564285906
		Valid N (listwise)	8				
	2013	RoA	9	-1,59350000	,7029000000	,1195333333	,6720725500
		Valid N (listwise)	9				
	2014	RoA	8	-,590000000	,8337000000	,2886000000	,4139908488
		Valid N (listwise)	8				
	2015	RoA	9	,0659000000	,7366000000	,3946888889	,2175674404
		Valid N (listwise)	9				
	2016	RoA	9	-2,27370000	,9081000000	,0655111111	,9840584020
		Valid N (listwise)	9				
Wholesale banks	2009	RoA	6	-,688800000	,4715000000	-,229950000	,4856362579
		Valid N (listwise)	6				
	2010	RoA	7	,1160000000	,4882000000	,2927857143	,1367280930
		Valid N (listwise)	7				
	2011	RoA	5	,0400000000	,4767000000	,2438000000	,1992100776
		Valid N (listwise)	5				
	2012	RoA	8	,0933000000	,4834000000	,2658750000	,1386919274
		Valid N (listwise)	8				
	2013	RoA	7	-,701300000	,5982000000	,1772571429	,4280645507
		Valid N (listwise)	7				
	2014	RoA	8	-,541400000	,7498000000	,2444250000	,3775791601
		Valid N (listwise)	8				
	2015	RoA	9	,1699000000	,6455000000	,3609555556	,1634146269
		Valid N (listwise)	9				
	2016	RoA	8	-1,37100000	,5966000000	,1608625000	,6480280769
		Valid N (listwise)	8				

Appendix 9a: Retail Banks Return on Equity T-Test

Group Statistics

	Period	N	Mean	Std. Deviation	Std. Error Mean
NormalRoE	Pre NIRP	48	4,4372	9,65474	1,39354
	Post NIRP	25	4,5717	8,86729	1,77346

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
NormalRoE	Equal variances assumed	,464	,498	-,058	71	,954	-,13445	2,31746	-4,75532	4,48643
	Equal variances not assumed			-,060	52,556	,953	-,13445	2,25546	-4,65922	4,39033

Appendix 9b: Retail Banks Sources of Income T-Test

Group Statistics

	Period	N	Mean	Std. Deviation	Std. Error Mean
NormalNiltoOP	Pre NIRP	49	,5434	,09232	,01319
	Post NIRP	25	,5386	,13512	,02702
NormalTradingtoOP	Pre NIRP	49	,0412	,04574	,00653
	Post NIRP	25	,0411	,05653	,01131
NormalFeestoOP	Pre NIRP	48	,2492	,05753	,00830
	Post NIRP	26	,2262	,06782	,01330
NormalOthertoOP	Pre NIRP	48	,1647	,09933	,01434
	Post NIRP	26	,1968	,12340	,02420

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
NormalNiltoOP	Equal variances assumed	7,583	,007	,181	72	,857	,00482	,02666	-,04833	,05797
	Equal variances not assumed			,160	35,779	,874	,00482	,03007	-,05618	,06582
NormalTradingtoOP	Equal variances assumed	1,978	,164	,003	72	,997	,00004	,01219	-,02426	,02434
	Equal variances not assumed			,003	40,456	,997	,00004	,01306	-,02634	,02642
NormalFeestoOP	Equal variances assumed	2,098	,152	1,546	72	,126	,02308	,01493	-,00668	,05284
	Equal variances not assumed			1,472	44,675	,148	,02308	,01568	-,00851	,05467
NormalOthertoOP	Equal variances assumed	2,527	,116	-1,217	72	,227	-,03210	,02637	-,08467	,02047
	Equal variances not assumed			-1,141	42,824	,260	-,03210	,02813	-,08883	,02463

Appendix 9c: Retail Banks Sources of Income Evolution (in % of total operating income, 2009-2016)

		Descriptive Statistics				
Date		N	Minimum	Maximum	Mean	Std. Deviation
2009	NiltoOP	11	,45	,66	,5621	,07311
	TradingtoOP	11	,00	,09	,0419	,02791
	FeestoOP	11	,16	,33	,2455	,05779
	OthertoOP	11	-,01	,28	,1505	,10540
	Valid N (listwise)	11				
2010	NiltoOP	10	,38	,68	,5517	,09413
	TradingtoOP	10	-,01	,06	,0264	,02543
	FeestoOP	10	,19	,36	,2610	,06240
	OthertoOP	10	-,05	,31	,1609	,12000
	Valid N (listwise)	10				
2011	NiltoOP	11	,43	,69	,5636	,09124
	TradingtoOP	11	-,02	,08	,0207	,02970
	FeestoOP	11	,19	,37	,2575	,06460
	OthertoOP	11	-,03	,28	,1582	,10632
	Valid N (listwise)	11				
2012	NiltoOP	8	,40	,68	,5248	,10300
	TradingtoOP	8	,01	,14	,0587	,04842
	FeestoOP	8	,17	,31	,2300	,05386
	OthertoOP	8	-,01	,30	,1865	,11936
	Valid N (listwise)	8				
2013	NiltoOP	9	,28	,70	,5046	,13214
	TradingtoOP	9	-,06	,23	,0475	,07957
	FeestoOP	9	,13	,38	,2454	,08091
	OthertoOP	9	,02	,36	,2025	,11813
	Valid N (listwise)	9				
2014	NiltoOP	8	,29	,73	,5060	,15129
	TradingtoOP	8	,01	,23	,0794	,07870
	FeestoOP	8	,13	,30	,2199	,07199
	OthertoOP	8	-,01	,35	,1947	,14349
	Valid N (listwise)	8				
2015	NiltoOP	9	,35	,73	,5464	,14156
	TradingtoOP	9	-,02	,15	,0409	,05946
	FeestoOP	9	,14	,32	,2271	,07228
	OthertoOP	9	,01	,33	,1855	,11977
	Valid N (listwise)	9				
2016	NiltoOP	9	,32	,73	,5584	,13670
	TradingtoOP	9	-,03	,08	,0261	,03829
	FeestoOP	9	,16	,32	,2323	,06552
	OthertoOP	9	,01	,34	,1832	,11524
	Valid N (listwise)	9				

Appendix 9d: Retail Banks Total Loans Evolution (in % of total assets, 2009-2016)

Descriptive Statistics						
Date		N	Minimum	Maximum	Mean	Std. Deviation
2009	Loans to Assets	11	,6088047577	,8179258100	,6979158986	,0678340204
	Valid N (listwise)	11				
2010	Loans to Assets	10	,6109654848	,7982240139	,6907453531	,0570774189
	Valid N (listwise)	10				
2011	Loans to Assets	11	,5964366024	,7828522089	,6616360682	,0569086902
	Valid N (listwise)	11				
2012	Loans to Assets	8	,5864319471	,7218150256	,6768358036	,0477435767
	Valid N (listwise)	8				
2013	Loans to Assets	9	,6217798941	,7620657815	,6866676847	,0441925669
	Valid N (listwise)	9				
2014	Loans to Assets	8	,6016981812	,7416225650	,6636280996	,0492360602
	Valid N (listwise)	8				
2015	Loans to Assets	9	,6098555504	,7572346221	,6863273450	,0515809267
	Valid N (listwise)	9				
2016	Loans to Assets	9	,6085040605	,7714535613	,6917471686	,0474661189
	Valid N (listwise)	9				

Appendix 9e: Retail Banks Total Equity Evolution (in % of total assets, 2009-2016)

Descriptive Statistics						
Date		N	Minimum	Maximum	Mean	Std. Deviation
2009	Equity to Assets	11	,0231680310	,1009669249	,0620776364	,0208730636
	Valid N (listwise)	11				
2010	Equity to Assets	10	,0321033073	,0914668343	,0611559878	,0164067832
	Valid N (listwise)	10				
2011	Equity to Assets	11	,0282196885	,0757909644	,0586803508	,0143542956
	Valid N (listwise)	11				
2012	Equity to Assets	8	,0327180654	,0798676533	,0565719890	,0140464642
	Valid N (listwise)	8				
2013	Equity to Assets	9	,0364709614	,0899967939	,0626102487	,0161680283
	Valid N (listwise)	9				
2014	Equity to Assets	8	,0384550763	,0850590964	,0623660046	,0161946994
	Valid N (listwise)	8				
2015	Equity to Assets	9	,0431668275	,0897414193	,0627468629	,0153168082
	Valid N (listwise)	9				
2016	Equity to Assets	9	,0480047252	,0806307988	,0638645268	,0112188109
	Valid N (listwise)	9				

Appendix 10a: Investment Banks Return on Equity T-Test

Group Statistics

	Period	N	Mean	Std. Deviation	Std. Error Mean
NormalRoE	Pre NIRP	42	3,8555	6,65479	1,02686
	Post NIRP	23	4,8842	5,85506	1,22087

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
NormalRoE	Equal variances assumed	,772	,383	-,621	63	,537	-,102866	1,65676	-4,33942	2,28211
	Equal variances not assumed			-,645	50,560	,522	-,102866	1,59529	-4,23201	2,17470

Appendix 10b: Investment Banks Sources of Income T-Test

Group Statistics

	Period	N	Mean	Std. Deviation	Std. Error Mean
NormalNiltoOP	Pre NIRP	41	,5529	,19059	,02977
	Post NIRP	24	,4748	,18361	,03748
NormalTradingtoOP	Pre NIRP	42	,0597	,12851	,01983
	Post NIRP	23	,0827	,08981	,01873
NormalFeestoOP	Pre NIRP	42	,3097	,09267	,01430
	Post NIRP	23	,3300	,10647	,02220
NormalOthertoOP	Pre NIRP	42	,0974	,25307	,03905
	Post NIRP	23	,0799	,24704	,05151

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
NormalNiltoOP	Equal variances assumed	,144	,705	1,616	63	,111	,07813	,04834	-,01846	,17473
	Equal variances not assumed			1,632	49,776	,109	,07813	,04786	-,01801	,17428
NormalTradingtoOP	Equal variances assumed	3,105	,083	-,761	63	,449	-,02300	,03021	-,08338	,03737
	Equal variances not assumed			-,843	59,115	,402	-,02300	,02727	-,07758	,03157
NormalFeestoOP	Equal variances assumed	,548	,462	-,803	63	,425	-,02035	,02535	-,07100	,03029
	Equal variances not assumed			-,771	40,316	,445	-,02035	,02641	-,07371	,03300
NormalOthertoOP	Equal variances assumed	,681	,413	,269	63	,789	,01750	,06510	-,11260	,14760
	Equal variances not assumed			,271	46,339	,788	,01750	,06464	-,11259	,14759

Appendix 10c: Investment Banks Sources of Income Evolution (in % of total operating income, 2009-2016)

Descriptive Statistics						
Date		N	Minimum	Maximum	Mean	Std. Deviation
2009	NiltoOP	7	,14	1,12	,5738	,30851
	TradingtoOP	7	-,66	,23	,0032	,30481
	FeestoOP	7	,12	,43	,3455	,11334
	OthertoOP	7	-,27	,69	,0775	,31927
	Valid N (listwise)	7				
2010	NiltoOP	8	,13	,89	,5832	,24922
	TradingtoOP	8	-,26	,11	,0309	,12174
	FeestoOP	8	,13	,47	,3273	,11131
	OthertoOP	8	-,28	,69	,0586	,29564
	Valid N (listwise)	8				
2011	NiltoOP	9	,16	,75	,5247	,17565
	TradingtoOP	9	-,02	,15	,0502	,06202
	FeestoOP	9	,13	,40	,2801	,07920
	OthertoOP	9	,00	,69	,1450	,20781
	Valid N (listwise)	9				
2012	NiltoOP	9	,15	,76	,5530	,19049
	TradingtoOP	9	,01	,24	,0764	,07800
	FeestoOP	9	,12	,40	,2946	,09120
	OthertoOP	9	-,30	,70	,0760	,27237
	Valid N (listwise)	9				
2013	NiltoOP	9	,14	,74	,5212	,17999
	TradingtoOP	9	-,01	,18	,0979	,07212
	FeestoOP	9	,13	,45	,3027	,10159
	OthertoOP	9	-,26	,72	,0782	,26112
	Valid N (listwise)	9				
2014	NiltoOP	9	,12	,76	,5250	,19533
	TradingtoOP	9	,02	,30	,0939	,08898
	FeestoOP	9	,11	,46	,3143	,11491
	OthertoOP	9	-,39	,74	,0668	,29421
	Valid N (listwise)	9				
2015	NiltoOP	7	,12	,61	,4448	,16921
	TradingtoOP	7	,02	,20	,0986	,06926
	FeestoOP	7	,13	,45	,3320	,10509
	OthertoOP	7	-,18	,73	,1245	,28658
	Valid N (listwise)	7				
2016	NiltoOP	8	,11	,63	,4597	,16460
	TradingtoOP	8	,03	,20	,0813	,06023
	FeestoOP	8	,13	,52	,3537	,12413
	OthertoOP	8	-,11	,74	,1053	,26766
	Valid N (listwise)	8				

Appendix 10d: Investment Banks Total Loans Evolution (in % of total assets, 2009-2016)

Descriptive Statistics						
Date		N	Minimum	Maximum	Mean	Std. Deviation
2009	Loans to Assets	7	,1742215446	,5013651094	,3368676325	,1184743166
	Valid N (listwise)	7				
2010	Loans to Assets	8	,2156898244	,5015176363	,3459581293	,0978244173
	Valid N (listwise)	8				
2011	Loans to Assets	9	,1925398190	,5013700934	,3505296319	,1077915043
	Valid N (listwise)	9				
2012	Loans to Assets	9	,1988201407	,5079879791	,3469522574	,1094631969
	Valid N (listwise)	9				
2013	Loans to Assets	9	,2058386462	,5255021241	,3643855405	,1087135281
	Valid N (listwise)	9				
2014	Loans to Assets	9	,2032744216	,5273479243	,3614378525	,1159012771
	Valid N (listwise)	9				
2015	Loans to Assets	7	,2205010940	,5341501688	,3433871416	,1018725671
	Valid N (listwise)	7				
2016	Loans to Assets	8	,2319850259	,5057812500	,3704895899	,1025686686
	Valid N (listwise)	8				

Appendix 10e: Investment Banks Total Equity Evolution (in % of total assets, 2009-2016)

Descriptive Statistics						
Date		N	Minimum	Maximum	Mean	Std. Deviation
2009	Equity to Assets	7	,0253014666	,0529776610	,0367096431	,0100595333
	Valid N (listwise)	7				
2010	Equity to Assets	8	,0264437483	,0582034330	,0371630897	,0111222072
	Valid N (listwise)	8				
2011	Equity to Assets	9	,0252575779	,0587703499	,0365168822	,0112508618
	Valid N (listwise)	9				
2012	Equity to Assets	9	,0268212780	,0621248336	,0399537716	,0118127386
	Valid N (listwise)	9				
2013	Equity to Assets	9	,0315266350	,0608079234	,0449911972	,0093047271
	Valid N (listwise)	9				
2014	Equity to Assets	9	,0353426337	,0673847961	,0487751998	,0095207718
	Valid N (listwise)	9				
2015	Equity to Assets	7	,0388643387	,0626535529	,0492924000	,0082430195
	Valid N (listwise)	7				
2016	Equity to Assets	8	,0407526724	,0680168253	,0523258386	,0104978924
	Valid N (listwise)	8				

Appendix 11a: Wholesale Banks Return on Equity T-Test

Group Statistics

	Period	N	Mean	Std. Deviation	Std. Error Mean
NormalRoE	Pre NIRP	33	2,4583	11,09205	1,93088
	Post NIRP	24	4,5395	9,80267	2,00096

Independent Samples Test

		Levene's Test for Equality of Variances						t-test for Equality of Means		95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference		Lower	Upper
NormalRoE	Equal variances assumed	,378	,541	-,734	55	,466	-2,08117	2,83617		-7,76498	3,60264
	Equal variances not assumed			-,748	52,844	,458	-2,08117	2,78067		-7,65888	3,49653

Appendix 11b: Wholesale Banks Sources of Income T-Test

Group Statistics

	Period	N	Mean	Std. Deviation	Std. Error Mean
NormalNiltoOPIncome	Pre NIRP	33	,5354	,14649	,02550
	Post NIRP	25	,5029	,13288	,02658
NormalTradingtoOPIncome	Pre NIRP	34	,0885	,08233	,01412
	Post NIRP	24	,0771	,05704	,01164
NormalFeestoOPIncome	Pre NIRP	34	,2840	,06439	,01104
	Post NIRP	24	,3078	,06482	,01323
NormalOthertoOPIncome	Pre NIRP	34	,1000	,16205	,02779
	Post NIRP	24	,1023	,16337	,03335

Independent Samples Test

		Levene's Test for Equality of Variances						t-test for Equality of Means		95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference		Lower	Upper
NormalNiltoOPIncome	Equal variances assumed	,410	,525	,869	56	,388	,03246	,03734		-,04233	,10726
	Equal variances not assumed			,881	54,126	,382	,03246	,03683		-,04138	,10630
NormalTradingtoOPIncome	Equal variances assumed	2,572	,114	,582	56	,563	,01134	,01947		-,02766	,05033
	Equal variances not assumed			,619	55,992	,538	,01134	,01830		-,02533	,04800
NormalFeestoOPIncome	Equal variances assumed	,049	,825	-1,378	56	,174	-,02373	,01721		-,05821	,01076
	Equal variances not assumed			-1,377	49,473	,175	-,02373	,01723		-,05835	,01090
NormalOthertoOPIncome	Equal variances assumed	,561	,457	-,053	56	,958	-,00231	,04335		-,08915	,08452
	Equal variances not assumed			-,053	49,425	,958	-,00231	,04341		-,08953	,08490

Appendix 11c: Wholesale Banks Sources of Income Evolution (in % of total operating income, 2009-2016)

Descriptive Statistics						
Date		N	Minimum	Maximum	Mean	Std. Deviation
2009	NiltoOPIncome	7	,29	,75	,5649	,17331
	TradingtoOPIncome	7	-,12	,22	,0719	,13349
	FeestoOPIncome	7	,17	,40	,2684	,07250
	OthertoOPIncome	7	-,14	,36	,0947	,19561
	Valid N (listwise)	7				
2010	NiltoOPIncome	7	,27	,71	,5067	,15243
	TradingtoOPIncome	7	,01	,23	,1154	,07743
	FeestoOPIncome	7	,23	,36	,2874	,05002
	OthertoOPIncome	7	-,06	,37	,0905	,17992
	Valid N (listwise)	7				
2011	NiltoOPIncome	5	,27	,73	,5178	,19707
	TradingtoOPIncome	5	-,07	,15	,0306	,08259
	FeestoOPIncome	5	,24	,31	,2812	,02674
	OthertoOPIncome	5	,00	,37	,1703	,17248
	Valid N (listwise)	5				
2012	NiltoOPIncome	8	,28	,66	,5285	,14573
	TradingtoOPIncome	8	,03	,24	,0933	,07189
	FeestoOPIncome	8	,18	,37	,2816	,06542
	OthertoOPIncome	8	-,13	,36	,0966	,16880
	Valid N (listwise)	8				
2013	NiltoOPIncome	7	,29	,72	,5208	,15433
	TradingtoOPIncome	7	,03	,18	,0954	,05089
	FeestoOPIncome	7	,18	,43	,2892	,08094
	OthertoOPIncome	7	-,18	,36	,0946	,18839
	Valid N (listwise)	7				
2014	NiltoOPIncome	8	,28	,68	,5222	,14579
	TradingtoOPIncome	8	,01	,19	,0839	,05913
	FeestoOPIncome	8	,18	,48	,3117	,09281
	OthertoOPIncome	8	-,16	,36	,0821	,17703
	Valid N (listwise)	8				
2015	NiltoOPIncome	9	,27	,65	,5218	,14060
	TradingtoOPIncome	9	-,02	,15	,0661	,05459
	FeestoOPIncome	9	,23	,51	,3260	,08322
	OthertoOPIncome	9	-,08	,37	,0862	,14892
	Valid N (listwise)	9				
2016	NiltoOPIncome	8	,24	,64	,4905	,15916
	TradingtoOPIncome	8	,01	,25	,0997	,07661
	FeestoOPIncome	8	,24	,38	,2919	,05339
	OthertoOPIncome	8	-,13	,48	,1179	,20384
	Valid N (listwise)	8				

Appendix 11d: Wholesale Banks Total Loans Evolution (in % of total assets, 2009-2016)

		Descriptive Statistics				
Date		N	Minimum	Maximum	Mean	Std. Deviation
2009	Loans to Assets	7	,3634568393	,5965059608	,4896334938	,0838320188
	Valid N (listwise)	7				
2010	Loans to Assets	7	,4068797652	,5882927999	,5236850624	,0638293268
	Valid N (listwise)	7				
2011	Loans to Assets	5	,4742308057	,5525538320	,5112048351	,0278158241
	Valid N (listwise)	5				
2012	Loans to Assets	8	,4904833986	,5972044530	,5425095299	,0366877653
	Valid N (listwise)	8				
2013	Loans to Assets	7	,5257618912	,5977836486	,5553508268	,0274916830
	Valid N (listwise)	7				
2014	Loans to Assets	8	,4501659839	,5789169861	,5335585052	,0419087147
	Valid N (listwise)	8				
2015	Loans to Assets	9	,4648633635	,6295958055	,5399107140	,0482031499
	Valid N (listwise)	9				
2016	Loans to Assets	8	,4565799195	,6352109357	,5429897367	,0545212748
	Valid N (listwise)	8				

Appendix 11e: Wholesale Banks Total Equity Evolution (in % of total assets, 2009-2016)

		Descriptive Statistics				
Date		N	Minimum	Maximum	Mean	Std. Deviation
2009	Equity to Assets	7	,0255651042	,0464559750	,0378350794	,0079160821
	Valid N (listwise)	7				
2010	Equity to Assets	7	,0325904528	,0828833697	,0477632585	,0163799406
	Valid N (listwise)	7				
2011	Equity to Assets	5	,0364700560	,0460520358	,0411503507	,0043064827
	Valid N (listwise)	5				
2012	Equity to Assets	8	,0396000056	,0745376200	,0553954091	,0145356209
	Valid N (listwise)	8				
2013	Equity to Assets	7	,0451361721	,0769857958	,0571596115	,0127212956
	Valid N (listwise)	7				
2014	Equity to Assets	8	,0441304194	,0816673049	,0569556308	,0132532435
	Valid N (listwise)	8				
2015	Equity to Assets	9	,0479726930	,0737235866	,0585833019	,0092665395
	Valid N (listwise)	9				
2016	Equity to Assets	8	,0478274349	,0757364174	,0552726591	,0086276043
	Valid N (listwise)	8				

Appendix 12: Evolution of the Loans and Deposits to Non-Financial Corporations and Households (December 2014- June 2016)

