

# DLT e Correspondent Banking

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It's a jungle out there

## Target T2 Facts 2015

<b>TARGET2 facts in 2015</b>	
<b>No of participants</b>	TARGET2 had 1,004 direct participants, 735 indirect participants and 5,292 correspondents
<b>No of ancillary systems</b>	TARGET2 settled the cash positions of 79 ancillary systems
<b>Daily averages</b>	TARGET2 processed a daily average of 343,729 payments, representing a daily average value of €1.8 trillion
<b>Average transaction value</b>	€5.3 million
<b>Payment values</b>	More than two-thirds of all TARGET2 payments had a value of less than €50,000 each; 12% of all payments had value of over €1 million
<b>Peaks</b>	The peak in volume turnover was 7 April 2015 with 512,422 transactions and peak value turnover was on 27 February 2015 with €2,635 billion
<b>Large-value payment system traffic</b>	TARGET2's share in total large-value payment system traffic in euro was 91% in value terms and 61% in volume terms
<b>SSP technical availability</b>	99.98%
<b>99.94% of TARGET2 payments were processed in less than five minutes</b>	

# ABE-EBA Facts 2015



## EBA CLEARING Annual Statistics

Year	Payments Settled (E1/S1/S2 SCT-SDD) (Number)	Annual Volume growth (%)	Value of Payments settled (E1/S1/S2 SCT-SDD) (EUR billion)	Annual Value growth (%)	Average Value per payment	Average Daily volume	Average Daily value (EUR billion)
2016	10,472,391,957	11.63%	62,418	0.20%	5,960	40,769,530	243
2015	9,381,242,072	4.34%	62,296	7.66%	6,641	36,671,779	243
2014	8,991,371,530	463.77%	57,866	10.21%	6,436	35,306,199	227
2013	1,594,856,865	106.11%	52,507	-13.03%	32,923	6,307,674	206
2012	773,800,399	43.18%	60,375	-8.20%	78,024	3,031,923	237
2011	540,424,341	91.10%	65,768	3.80%	121,697	2,104,884	256
2010	282,794,421	40.31%	63,362	-3.92%	224,056	1,090,089	246
2009	201,550,349	10.46%	65,947	-10.93%	327,198	786,518	258
2008	182,471,465	25.27%	74,036	26.32%	405,739	715,318	289
2007	145,663,899	28.07%	58,612	20.83%	402,378	572,689	230
2006	113,736,465	23.63%	48,509	12.70%	426,499	447,685	191
2005	91,996,184	30.32%	43,043	-2.68%	467,882	357,991	168
2004	70,592,603	50.16%	44,231	-1.29%	626,562	272,108	171
2003	47,011,524	26.85%	44,810	-6.71%	953,169	184,269	176
2002	37,060,200	24.62%	48,033	-7.71%	1,296,074	145,355	189
2001	29,738,941	20.16%	52,045	4.83%	1,750,078	117,407	205
2000	24,749,582	40.28%	49,646	12.28%	2,005,944	97,309	195

## Fedwire Funds service Facts

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Year	Transfers originated (number)	Annual volume growth (percent)	Value of transfers originated <sup>1</sup> (\$ millions)	Annual value growth (percent)	Average value per transfer (\$ millions)	Average daily volume of transfers <sup>2</sup> (number)	Average daily value of transfers <sup>2</sup> (\$ millions)
2016	148,142,402	3.8	766,961,537	(8.1)	5.18	590,209	3,055,624
2015	142,757,101	5.7	834,630,440	(5.6)	5.85	566,496	3,312,026
2014	135,022,749	0.6	884,551,876	24.0	6.55	537,939	3,524,111
2013	134,244,177	2.0	713,310,354	19.0	5.31	534,837	2,841,874
2012	131,637,349	3.6	599,200,625	(9.7)	4.55	524,452	2,387,253
2011	127,022,420	1.5	663,837,575	9.1	5.23	506,065	2,644,771
2010	125,130,561	0.3	608,325,851	(3.6)	4.86	496,550	2,413,991
2009	124,731,244	(5.0)	631,127,108	(16.4)	5.06	494,965	2,504,473
2008	131,362,107	(2.5)	754,974,633	12.6	5.75	521,278	2,995,931
2007	134,688,381	0.8	670,665,569	17.1	4.98	536,607	2,671,974
2006	133,605,267	0.9	572,645,790	10.4	4.29	532,292	2,281,457

## CHIPS Facts

2006	251	46	\$394,567,305,375	\$1,571,981,296	77,876,444	310,265	8.9%	\$5,067	2006
2007	251	45	\$485,624,129,268	\$1,934,757,487	87,346,025	347,992	12.2%	\$5,560	2007
2008	252	47	\$508,758,657,298	\$2,018,883,561	91,992,829	365,051	4.9%	\$5,530	2008
2009	252	48	\$364,355,126,940	\$1,445,853,678	84,844,034	336,683	-7.8%	\$4,294	2009
2010	252	50	\$365,096,293,529	\$1,448,794,816	90,922,939	360,805	7.2%	\$4,015	2010
2011	251	52	\$403,349,041,732	\$1,606,968,294	95,057,407	378,715	5.0%	\$4,243	2011
2012	251	52	\$364,818,627,028	\$1,453,460,665	97,130,016	386,972	2.2%	\$3,756	2012
2013	251	50	\$379,984,841,649	\$1,513,883,831	103,052,600	410,568	6.1%	\$3,687	2013
2014	251	49	\$390,695,219,117	\$1,556,554,658	109,409,700	435,895	6.2%	\$3,571	2014
2015	252	49	\$375,862,262,132	\$1,491,516,913	110,408,835	438,130	0.5%	\$3,404	2015
2016	169	48	\$241,199,572,224	\$1,427,216,404	72,966,592	431,755	-1.5%	\$3,306	2016**
<b>Totals</b>	<b>11,646</b>		<b>\$10,160,886,420,923</b>		<b>2,188,530,095</b>				

## Situazione del regolamento dei mercati di MM e FX internazionali

- Non é possibile di regolamento in moneta di banca centrale se non alle banche residenti in quel paese negli esempi T2 Fedwire
- Anche i sistemi di netting all'ingrosso pongono limitazioni per l'accesso in relazione alla territorialità della banca negli esempi ABE-EBA CHIPS
- Per una banca è quindi necessario per operare in una divisa diversa dalla propria divisa domestica avvalersi del meccanismo di correspondent Banking. Ossia di aprire dei conti Nostri presso banche residenti in quei paesi ed operare con loro in qualità di clienti ( questo sia per operazioni di tipo commerciale che finanziario)
- Solo 18 divise hanno sistemi di regolamento RTGS con caratteristiche uniformi ed equivalenti tali da essere considerati affidabili da CLS Bank per il clearing della Forex quindi i più affidabili
- Per alcune divise i sistemi di regolamento in moneta di banca centrale sono batch o non esistono e il regolamento interbancario avviene con correspondent banking

# Best of breeds

## Central banks for CLS-eligible currencies



# Qualche dato relativo ai volumi del correspondent Banking internazionale

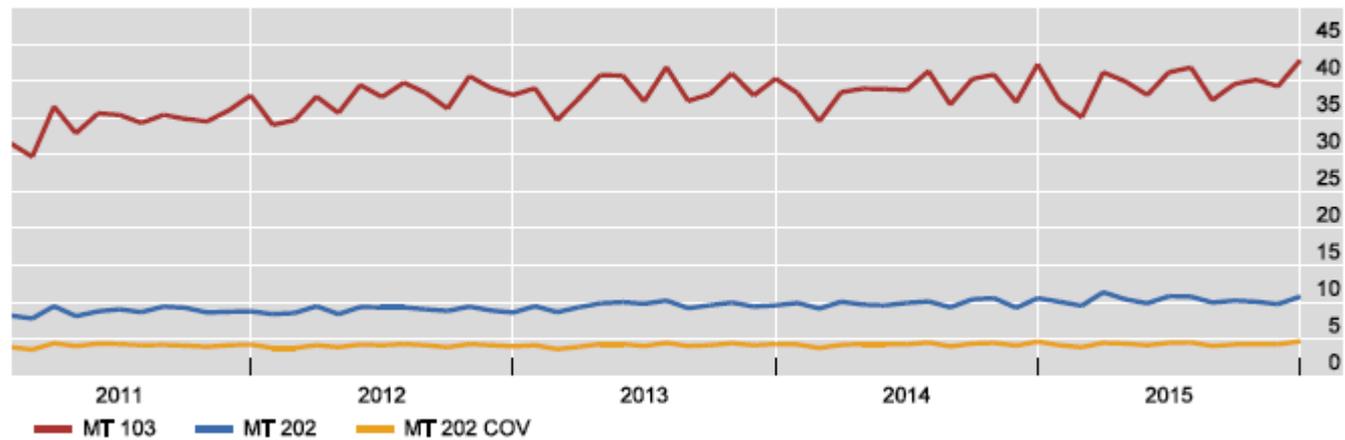
I dati relativi al capital markets sono quelli dei messaggi 202

Fonte (3) SWIFT Watch

## Monthly transaction volume by message type

Millions

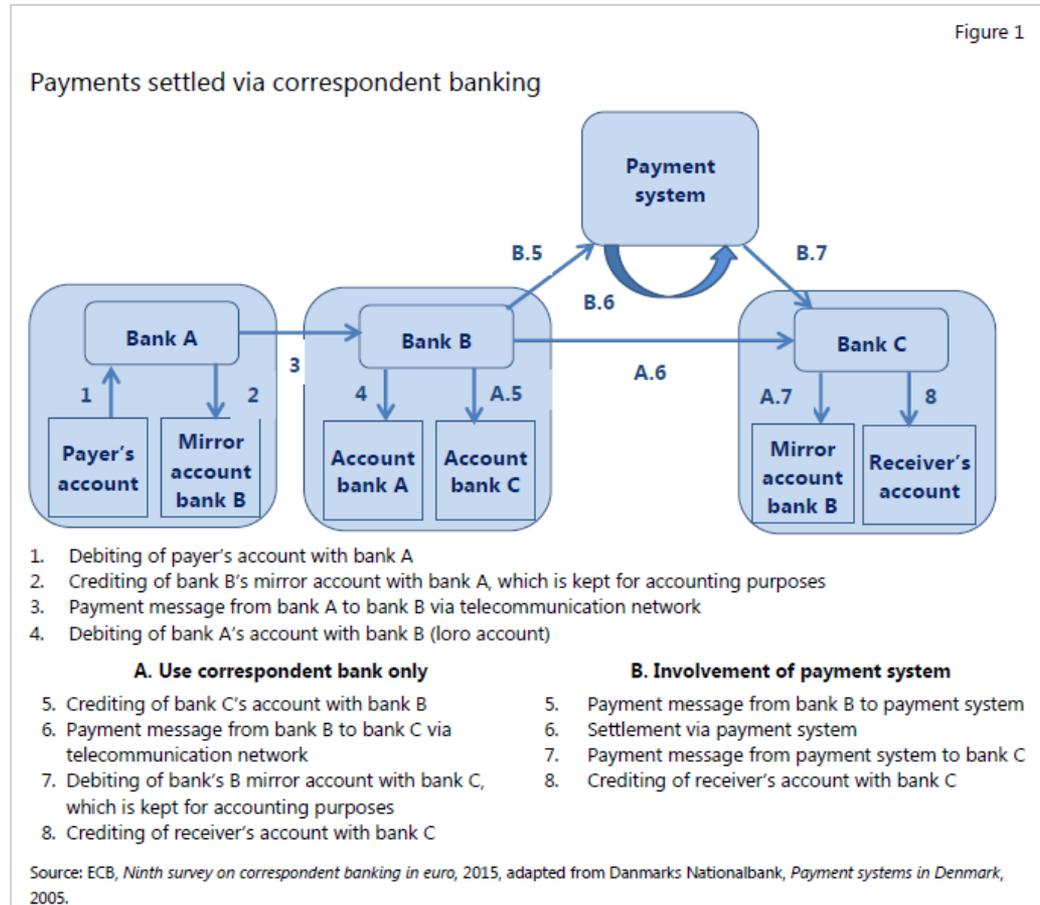
Graph 6



Source: SWIFT Watch.

# Schema Pagamenti Pagamenti Correspondent Banking

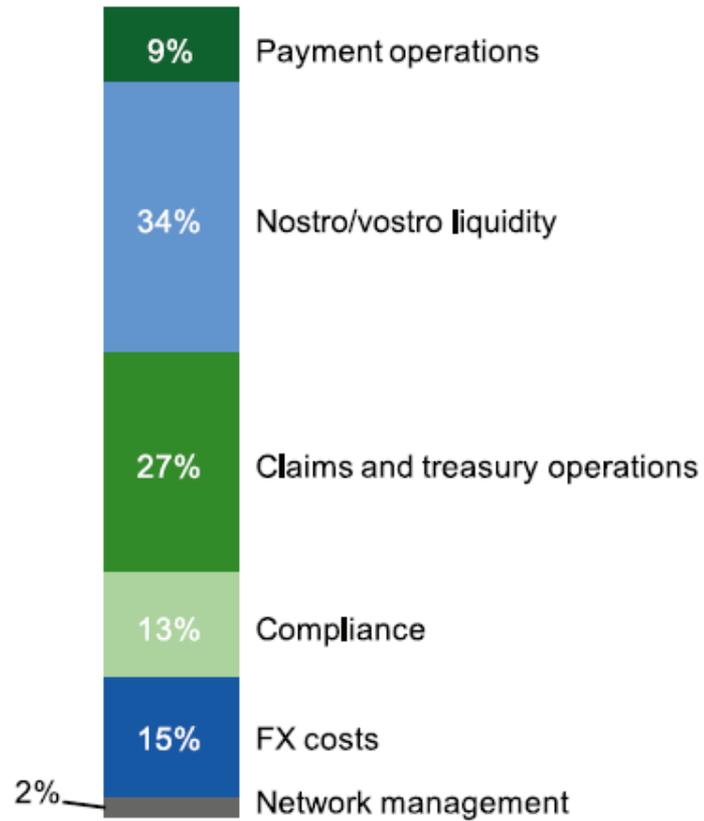
Fonte (1)



# Schema dei costi pagamenti internazionali

Fonte (4)

Average cost: 25 – 35 USD



## Confronto tra il regolamento in RTGS e il Correspondent Banking

<b>RTGS</b>	<b>Correspondent banking</b>
Regolamento in moneta di banca centrale	Regolamento in moneta di banca commerciale
Costo di processing fissato dal sistema in base ai volumi o no	Costo di processing contrattato singolarmente
STP elevato	STP non elevato il 27% dovuto a claim e costo di liquidità
Cut-off stabiliti univocamente dal sistema	Cut-off stabilito singolarmente
Processing time sull'ordine dei minuti	Processing time in giornata salvo casi particolari
Poco spazio per DLT ?	Molto spazio per DLT ?

Sviluppi cui DTL potrebbe rivelarsi utile o che già la prevedono

- KYC ( Know Your Customer) KYCC ( Know Your Customer's customer)
- SWIFT gpi (Global payment innovation initiative) DLT in fase 3 (SSI Payment Tracker)
- CLSNet già disponibile sia con tecnologia tradizionale che DLT ( Hyperleger Fabric)

# Riferimenti

- 1) BIS Committee on Payments and Market Infrastructures  
Correspondent banking  
-July 2016 ISBN 978-92-9197-616-4 (print) ISBN 978-92-9197-617-1 (online)
- 2) BIS Committee on Payments and Market Infrastructures  
Distributed ledger technology in payment, clearing and settlement An analytical framework -  
February 2017 ISBN 978-92-9259-031-4 (online)
- 3) European Central Bank Eurosystem  
Press release 26 September 2016 Payments statistics for 2015
- 4) ABE EBA Euro Banking Association Working Group on Cryptotechnology in International Payments  
Cryptotechnology in International Payments Information Paper
- Link ad descrizione dei sistemi di pagamenti nel mondo BIS Basilea  
<http://www.bis.org/cpmi/paysysinfo.htm?m=3%7C16%7C30>

# The song

- It's a jungle out there  
Disorder and confusion everywhere  
No one seems to care  
Well I do  
Hey, who's in charge here?