BRYAN, GARNIER & CO

INDEPENDENT RESEARCH

1st February 2016

TMT

Worldpay

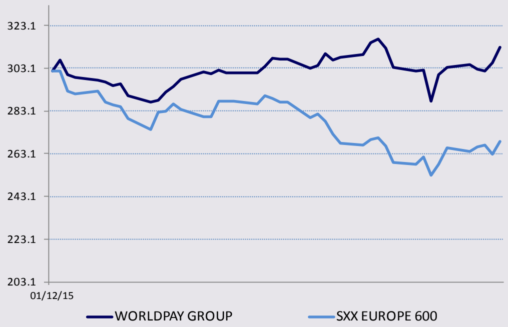
An aisle-end stock, but not a bargain

Fair Value 290p (price 313.00p)

NEUTRAL
Coverage initiated

Bloomberg	WPG LN
Reuters	WPG.L
12-month High / Low (p)	316.8 / 240.0
Market capitalisation (GBPm)	6,260
Enterprise Value (BG estimates GBPm)	7,644
Avg. 6m daily volume ('000 shares)	10,147
Free Float	51.3%
3y EPS CAGR	33.8%
Gearing (12/14)	-1,173%
Dividend yields (12/15e)	NM

YE December	12/14	12/15e	12/16e	12/17e
Revenue (GBPm)	3,627	4,000	4,280	4,622
EBITA GBPm)	296.3	335.0	376.6	422.5
Op.Margin (%)	8.2	8.4	8.8	9.1
Diluted EPS (p)	5.71	6.30	11.69	13.70
EV/Sales	2.35x	1.91x	1.75x	1.58x
EV/EBITDA	29.8x	25.1x	18.6x	14.4x
EV/EBITA	28.7x	22.8x	19.9x	17.3x
P/E	54.8x	49.7x	26.8x	22.9x
ROCE	14.0	15.5	15.0	16.1



We are initiating Worldpay with a Neutral recommendation and a FV of 290p (downside of 7%). While its offer corresponds well to current demand from merchants, we estimate its recurring sales, the rising share of e-commerce in the mix and potential to improve EBITDA are already priced in. After gaining +30% since its IPO on 13th October 2015, the share harbours no upside even when looking just at EV/sales and EV/EBITDA multiples until 2016e (namely until the end of the plan to invest in the platforms). The share is trading on an average premium relative to peers of 22% for 2016/17e.

- **Worldpay is a fintech**, namely a software company operating in the payments segment. **Former UK division of RBS** (sold in 2010 to Bain and Advent for EV of GBP2bn), the group's core business is **processing and acquiring payment transactions** (in-store in the UK and US, and e-commerce on a global scale). Its offering targets a wide range of merchants (from small/medium-sized merchants to large retailers).

- Based on the number of card transactions processed at merchants, **Worldpay is the no. 5 acquirer in the world** (market share of 5%e), the **no. 1 in Europe** (market share of 20%e, with uncontested leadership status in the UK, market share of 42%) **and no. 9 in the US** (market share of 3%e). **In e-commerce, we estimate it is the global leader** (market share of 6%e) **and the European no. 1** (market share of 20%e).

- **We believe Worldpay's offers and technologies respond well to current issues at merchants**, in both physical stores and in e-commerce. Indeed, merchants are looking for a multichannel solution enabling them to accept any payment type via any channel and in any currency and offering a secure and fluid purchasing experience. **However, it still has everything to prove** (current fundamentals are not impressive for the payments sector). **Despite our far from pessimistic estimates, the share is expensive** (even taking into account only EV/sales and EV/EBITDA). We believe it will only be reliable to reason in PEG once investment in the platforms is complete, early 2017e. **The share is trading on an average premium of 22% vs. its peers for 2016/17e**.

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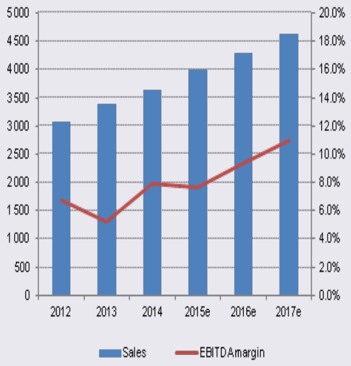

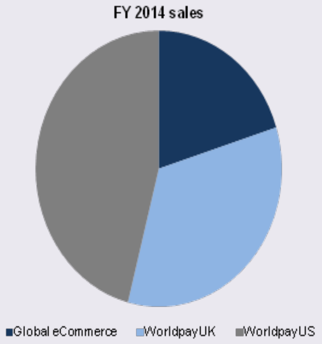

Company description

Worldpay is a global leader in payments processing/acquiring technology & solutions for business customers. It operates secure proprietary technology platforms, enabling companies to accept a vast array of payment types, across multiple channels, anywhere in the world. The group has three operating divisions: Worldpay UK, Worldpay US and global eCom.

Simplified Profit & Loss Account (GBPm)	**2012**	**2013**	**2014**	**2015e**	**2016e**	**2017e**
Revenues	3,077	3,379	3,627	4,000	4,280	4,622
Change (%)	*-%*	*9.8%*	*7.3%*	*10.3%*	*7.0%*	*8.0%*
Ifl change (%)	*-%*	*8.8%*	*9.2%*	*7.0%*	*7.0%*	*8.0%*
EBITDA	207	177	286	304	402	506
EBIT	73.7	20.0	125	159	261	353
Underlying EBIT	246	277	296	335	377	422
Change (%)	*-%*	*12.6%*	*7.0%*	*13.1%*	*12.4%*	*12.2%*
Financial results	(147)	(218)	(172)	(166)	(55.7)	(51.7)
Pre-Tax profits	(73.2)	(198)	(46.8)	(7.3)	205	301
Tax	17.7	33.0	(2.9)	(7.0)	(55.3)	(78.2)
Profits from associates	0.0	0.0	0.0	0.0	0.0	0.0
Minority interests	0.0	0.0	0.0	0.0	0.0	0.0
Net profit	(55.5)	(165)	(50.0)	(14.9)	149	223
Restated net profit	68.8	93.6	91.7	126	234	274
Change (%)	*-%*	*36.0%*	*-2.0%*	*37.5%*	*85.5%*	*17.1%*
Cash Flow Statement (GBPm)						
Cash flow	142	82.6	174	131	292	376
Change in working capital	(0.30)	(11.3)	(30.6)	31.3	0.0	(23.1)
Capex, net	(114)	(132)	(143)	(164)	(175)	(125)
Financial investments, net	0.0	(65.0)	(99.4)	(16.6)	0.0	0.0
Dividends	0.0	0.0	0.0	0.0	0.0	(37.4)
Other	(101)	(561)	(100)	(9.8)	35.6	(3.8)
Net debt	1,368	2,055	2,254	1,384	1,232	1,045
Free Cash flow	28.0	(60.9)	0.65	(1.3)	117	229
Balance Sheet (GBPm)						
Net fixed assets	1,940	1,985	2,061	2,072	2,068	2,063
Investments	0.0	0.0	3.2	3.2	3.2	3.2
Deffered tax assets	0.0	0.0	0.0	0.0	0.0	0.0
Cash & equivalents	218	182	169	(1,337)	(1,185)	(997)
current assets	253	321	384	424	453	490
Other assets	1,323	1,164	1,210	1,334	1,428	1,542
Total assets	3,734	3,651	3,827	2,496	2,767	3,101
L & ST Debt	1,587	2,237	2,423	47.3	47.3	47.3
Provisions	12.7	46.7	22.6	22.6	22.6	22.6
Deffered tax liabilities	0.0	0.0	0.0	0.0	0.0	0.0
Others liabilities	1,669	1,507	1,574	1,736	1,857	2,006
Shareholders' equity	467	(139)	(192)	690	840	1,025
Total Liabilities	3,734	3,651	3,827	2,496	2,767	3,101
Capital employed	1,835	1,916	2,062	2,075	2,072	2,070
Ratios						
Operating margin	7.99	8.20	8.17	8.38	8.80	9.14
Tax rate	24.18	16.68	(6.16)	(88.38)	27.00	26.00
Net margin	(1.80)	(4.88)	(1.38)	(0.37)	3.49	4.82
ROE (after tax)	(11.89)	118	26.03	(2.16)	17.80	21.72
ROCE (after tax)	15.80	22.52	14.03	15.48	15.05	16.10
Gearing	293	(1,474)	(1,173)	200	147	102
Pay out ratio	0.0	0.0	0.0	0.0	25.00	25.00
Number of shares, diluted	116,218	116,218	1,605,083	2,000,000	2,000,000	2,000,000
Data per Share (p)						
EPS	(47.76)	(142)	(3.12)	(0.88)	7.47	11.13
Restated EPS	59.20	80.54	5.71	6.30	11.69	13.70
% change	*-%*	*36.0%*	*-92.9%*	*10.3%*	*85.5%*	*17.1%*
BVPS	401	(120)	(11.97)	34.52	42.00	51.26
Operating cash flows	122	71.07	10.83	6.57	14.60	18.82
FCF	24.09	(52.40)	0.04	(0.07)	5.83	11.43
Net dividend	0.0	0.0	0.0	0.0	1.87	2.78

Source: Company Data; Bryan, Garnier & Co ests.

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1. Investment Case

Why the interest now?

The reason for writing now

1/ Worldpay fits perfectly with the payments/security themes we are advising investors to play this year, **2/** the group is the most recently listed European company in this sector (13th Oct. 2015), **3/** as such, it offers another peer for the European payment companies we cover (Ingenico, Wirecard, Worldline).

Cheap or Expensive?

Valuation

Even though the group's offer fits perfectly with demand from merchants, we consider that all potential good news is already in the current share price (recurring sales, rising share of e-commerce in the mix and improvement in EBITDA margin). **The share is expensive relative to peers on a 2016/17e basis (premium of 22%).** Our FV of 290p is made up of an equi-weighted average between three valuation methods (DCF at 317p, peer comparison at 285p, and sum of the parts at 268p).

When will I start making money?

Catalysts

1/ The increase in transaction volumes processed (gradual disappearance of cash/checks to the benefit of electronic payments, regulatory changes, innovation etc.), **2/** the announcement of major contract gains, **3/** rising demand in terms of digital security, **4/** increasing share of e-commerce in the sales mix, **5/** leverage on operating expenses, **6/** volume/value effects prompted by the decline in interchange commissions decided on by the EU (which primarily concerns the UK division at Worldpay) and **7/** acquisitions and partnerships.

What's the value added?

Difference from consensus

The consensus does not seem to take account of the accounting and reporting differences that exist between the various payments players (particularly in terms of revenue recognition in the merchant acquiring segment: gross/net revenues). However these differences are important, since unless they are adjusted for, **they can make margin comparisons invalid and the application of market multiples irrelevant**. See section 4.3.

Could I lose money?

Risks to our investment case

1/ Contract delays/cancellations/losses, **2/** pressure on prices, **3/** reimbursement risk (inability of merchant to provide contractual services or to reimburse the associated payment), **4/** over-runs in the platform investment plan, **5/** arrival of new entrants/consolidation of major players, **6/** arrival of breakthrough technologies in which Worldpay is not positioned, **7/** dilutive acquisitions.

2. Investment summary

Worldpay, a UK company created in 1989, with around 4,500 employees, ranks among the leading providers of payment services (no. 5 in the world with market share of 5%). In concrete terms, its **core business is the processing and acquiring of payment orders by card for merchants**, both in-store and via payment gateways, enabling acceptance of payments on e-commerce sites (payment gateway). On a secondary basis, the group rents out EPTs, supplies risk management and fraud-prevention tools as well as cash services, data analytics and optimisation services. The group is highly exposed to **in-store payments in the UK** (no. 1 with market share of 20%) **and the US** (no. 9 with market share of 3%), and has a leadership position in **e-commerce both worldwide** (market share of 6%) **and in Europe** (market share of 42%). Worldpay has its own proprietary technological platforms (one for the UK and global e-commerce, and one for the US), enabling merchants to accept a wide range of electronic payment types via numerous channels (physical, online and mobile).

We do not consider the group's fundamentals particularly impressive for Payments (lfl sales up 7%, EBITDA margin at 7% and slightly positive FCF generation) **in view of: 1/** its strong positioning in physical merchants in the UK and US (80% of 2014 sales), which are difficult markets, **2/** a lack of size in the US, preventing the group from generating a significant leverage effect (fragmented market), **3/** investments in proprietary platforms that have overrun for some years and are continuing to weigh on figures (this is likely to be the case until 2016e) and **4/** the ensuing negative or weak FCF generation. **In contrast, the group's strengths lie in its: 1/** historically resilient organic sales growth (in line with the change in the number of electronic transactions and the high client retention rate), **2/** clear leadership position in physical payments in the UK (size effect enabling it to outperform local GDP growth), **3/** pioneering status in e-commerce with a leadership position in this high-growth market (in Europe and throughout the world) and **4/** focus on innovation and development (investment in its technological platforms, acquisitions and recruitments etc.), which should end up paying off over the medium term (operating leverage and then in terms of FCF).

As such, Worldpay is not a growth story, but rather a story of medium-term margin improvement (via the end to its GBP500m plan to invest in its platforms which should become effective in early 2017e, and the rising share of e-commerce in its mix). That said, the group still has much to prove since in 2015, we expect a fourth-year of net losses (publication on 8th March before trading).

In order to assess Worldpay's valuation, we advise investors to focus on EV/sales and EV/EBITDA multiples out to 2016e given that investments in platforms bloat capex and D&A expenses, and therefore bloat EV/EBIT and P/E multiples (we give the same advice for Worldline). **As of 2017e, we could reason in terms of PEG,** namely comparing P/E to EPS growth (methodology that we use for Ingenico and Wirecard).

We are initiating coverage of Worldpay with a Neutral recommendation and FV of 290p (downside of 7%). While Worldpay is part of the payments/security themes and its offer fully meets current demand from merchants (multi-channel solution), **the share is expensive relative to its peers** (premium of 22% for 2016/17e). **We believe the market has already played Worldpay's recurring sales and margin growth story** (since its IPO on 13th October 2015, the share price has risen 30%). At the current price, the share therefore has no margin for error, especially since we expect no potential EPS revisions either to our own figures or by the consensus for 2016/17e.

We present below a table of European payments players' KPIs, by integrating Equens to Worldline's figures from mid-May and by harmonizing the revenue reporting in the merchant acquiring segment (gross revenues allow comparisons of margins and EV/Sales multiples between companies).

Fig. 1: Comparison of European payments players (iso-reporting 2016e)

FY16e (m – local currency)	Worldpay (Neutral, 290p)	Wirecard (Buy, EUR52)	Worldline (Buy, EUR29)	Ingenico Group (Buy, EUR150)
Revenue (i.e. gross revenue)	**4,280.0**	**1,005.6**	**1,509.5**	**2,444.2**
LFL growth	*7.0%*	*20.8%*	*4.8%*	*11.7%*
EBITDA	**402.3**	**304.3**	**282.7**	**580.5**
Margin	*9.4%*	*30.3%*	*18.7%*	*23.8%*
Underly. EBIT	**376.6**	**269.1**	*202.5*	**507.2**
Margin	*8.8%*	*26.8%*	*13.4%*	*14.4%*
Rest. attrib. net income	**233.8**	**225.9**	**133.2**	**327.9**
Margin	*5.5%*	*22.5%*	*8.8%*	*13.4%*
Payout ratio	***25.0%***	***8.6%***	***25.0%***	***35.0%***
FCF/Underly. EBIT	***30.9%***	***43.6%***	***65.3%***	***68.4%***
Gearing	*146.7%*	*-33.9%*	*-49.1%*	*5.9%*
EV/sales (x)	**1.8**	**5.2**	**1.6**	**2.8**
EV/EBITDA (x)	**18.6**	**17.3**	**8.7**	**11.6**
P/E (x)	**26.8**	**25.4**	**22.1**	**20.4**

Source: Bryan, Garnier & Co ests.

We advise investors to rather play the payments and security themes via Wirecard, Worldline, and Ingenico Group.

Wirecard (Buy, FV of EUR52, sales 100% in payments, Q1 Top Pick): the group boasts the best fundamentals in the sector thanks to its positioning in e-commerce (pure-player in online payments) and emerging markets. It is the only player to have looked for growth in e-commerce where it can be found, namely in Southeast Asia (28% of its sales). We believe the take-off in e-commerce should really start in western countries as of this year. Wirecard should benefit in Europe where it is the no. 2 player. In contrast, it can no longer remain outside the Americas. As such, we expect the group to make an acquisition or team up with a player in the region this year (in North America or South America, both of which are attractive for e-commerce, the group has a net cash position) in order to obtain global presence. **2016 P/E of 25x vs EPS of +38%.**

Worldline (Buy, FV of EUR29, sales 77% in payments, Q1 Top Pick): whereas the group was not really viewed as a payments player, the acquisition of Equens has now hoisted it to the no. 1 position among PSPs in Europe (in sales terms). In addition, the operation required very little cash since it took the form of a joint venture and the group's financial flexibility remains intact to undertake other acquisitions. Every additional acquisition should help the group to better value its payments exposure. **The share is trading on EV/EBITDA of 8.7x** (consolidating Equens in mid-May) **vs 12x for a physical payments player, namely an unmerited discount of 28%.**

Ingenico Group (Buy, FV of EUR150, sales 100% in payments): the company has the most attractive commercial offering for merchants, namely one that is capable of providing a turn-key payments solution: payment terminals, security and transaction services, whether in-store or via an online payment gateway. We believe the group has good visibility on its EPT business out to 2017e and that afterwards, the payments services business will take over (this is set to require two acquisitions of EUR300me in sales each and the group has the means to pay in cash). As such, Ingenico should have a balanced sales mix over the medium term (50% EPT/50% services vs. 70/30 at the moment) and a more recurring sales profile (65%e vs. 45% at present), on which it should have operating leverage (pooling of its platforms). **2016 P/E of 20x vs EPS of +22%.**

3. The share offers no upside

The share price has gained 30% since its IPO last October. **We believe the group's recurring sales, the prospect of a rising share of e-commerce in its mix and margin improvement potential** (visible in EBITDA as long as investments in platforms have not ended) **are already priced in.**

We are initiating coverage of Worldpay with a Neutral recommendation and a Fair Value of 290p (downside of 7%), stemming from the average of three methods.

Fig. 2: Overview of various valuation methods (price on 29/01/16)

Pence	Valuation/share	Potential on last price
DCF	317	1%
Peer comparison	285	-9%
SOTP	268	-14%
Equi-weighted average	**290**	**-7%**

Source: Bryan, Garnier & Co ests.

3.1. DCF: 317p

Our DCF valuation is based on the following assumptions:

- A CAGR in 2016/2026e like-for-like sales of 6.2% (+7.8% for 2016/20e followed by +4.6% over 2021/26e), namely in line with the regions to which it is exposed (2015/19 CAGR of 7.3%e for non-cash transactions in value terms, source: Euromonitor). Sales growth may not look robust especially in physical acquiring in the UK and the US, but does have the advantage of being very resilient (fundamental trend for a gradual disappearance of cash/checks in favour of electronic payments) and should make the most of rising exposure to e-commerce.
- Average EBIT margin of 9.1% over 2016/2026e. This breaks down as follows: 6.1% in 2016e (vs 4.0% in 2015) with a gradual widening to a peak of 12.0% in 2021e, that we then move back down to 8.3% in 2026e. The margin is primarily set to be driven by growth in e-commerce, the end of the group's GBP500m investment plan for the proprietary platform (end of plan expected for early 2017e) and leverage on the volume of transactions processed.
- Over the medium term, we expect absorption of WCR of around GBP20m a year (except in 2015, when WCR was aided by two positive exceptional items: the transfer of Worldpay UK's major clients to Worldpay B.V., and the cut in interchange fees). Thereafter, we forecast that WCR will change in line with sales growth.
- Net investment spending of 4.1% of sales for 2015/16e (due to the remaining investments to be made in its proprietary payment platforms between now and early 2017e, in order to modernise them and separate them definitively from the RBS systems), followed by a return to a normal average capex level of 2.6% beyond (including 50% new developments and 50% maintenance).
- An average corporate tax rate of 24% over the entire period. This should exceed 27% in 2016e before gradually returning to 23% (normal average level in view of the group's geographical exposure to the UK, where the corporate tax rate has fallen).
- A discount rate of 7.54%, with a beta of 1.0x (namely close to the average beta levels of peer companies in our coverage, 0.94x for Ingenico and Wirecard, and 1.0x for Worldline), a risk premium of 6.40% and a risk-free rate of 2.00%.

- A growth rate to infinity of 3% (used for our other companies in the sector) since the payments market is growing steadily with a high level of recurrence in transaction services.

Fig. 3: Discount rate calculation

Inputs	**%**
Risk free rate	2.00
Market risk premium	6.40
ß (x)	1.00
Return on capital	8.40
Cost of debt after tax	3.65
Market cap (GBPm)	6,250.0
Net debt 2015e	1,384.3
WACC	**7.54**

Source: Bryan, Garnier & Co ests.

Fig. 4: DCF model

GBPm	**2016e**	**2017e**	**2018e**	**2019e**	**2020e**	**2021e**	**2022e**	**2023e**	**2024e**	**2025e**
Revenue (gross revenue)	**4,280**	**4,622**	**4,992**	**5,392**	**5,823**	**6,114**	**6,420**	**6,741**	**7,010**	**7,291**
Y/Y change	7.0%	8.0%	8.0%	8.0%	8.0%	5.0%	5.0%	5.0%	4.0%	4.0%
EBIT	**261.1**	**353.2**	**435.3**	**490.6**	**553.2**	**733.7**	**706.2**	**674.1**	**630.9**	**605.1**
Margin	6.1%	7.6%	8.7%	9.1%	9.5%	12.0%	11.0%	10.0%	9.0%	8.3%
Tax rate	27.0%	26.0%	25.0%	24.0%	23.0%	23.0%	23.0%	23.0%	23.0%	23.0%
EBIT after tax	190.6	261.3	326.5	372.9	425.9	564.9	543.8	519.0	485.8	466.0
+ Depreciation & amortisation	141.2	152.5	132.3	140.2	151.4	159.0	166.9	175.3	182.3	189.6
Cash flow from operations	331.8	413.9	458.8	513.1	577.3	723.9	710.7	694.3	668.1	655.5
- Net financial & tangible investments	-175.5	-124.8	-132.3	-140.2	-151.4	-159.0	-166.9	-175.3	-182.3	-189.6
- Change in WCR	0.0	-23.1	-17.5	-13.5	-14.6	-9.9	-9.8	-8.7	-5.9	-4.8
Free cash flow	156.3	266.0	309.0	359.4	411.4	555.0	534.0	510.4	479.9	461.2
Discounted free cash flows	**146.3**	**231.4**	**250.0**	**270.4**	**287.8**	**361.0**	**323.0**	**287.1**	**251.0**	**224.3**
Sum of discounted FCF	2,632.2									
+ Discounted terminal value	5,090.6									
- Net debt 2015e	-1,384.3									
- Minority interests, 2015e	0.0									
+ Financial fixed assets 2015e	3.2									
Valuation	**6,341.7**									
Number of shares fully diluted (m)	2,000.0									
Value per share (p)	**317.1**									

Source: Bryan, Garnier & Co ests.

Fig. 5: Sensitivity to discount rate and growth rate to infinity

p			**WACC**		
Growth rate to infinity	**6.54%**	**7.04%**	**7.54%**	**8.04%**	**8.54%**
2.00%	346.3	303.9	269.1	240.1	215.5
2.50%	382.0	331.4	290.7	257.4	229.6
3.00%	427.9	365.6	**317.1**	278.1	245.2
3.50%	488.8	409.6	350.0	303.4	266.1
4.00%	573.8	468.1	392.2	335.0	290.3

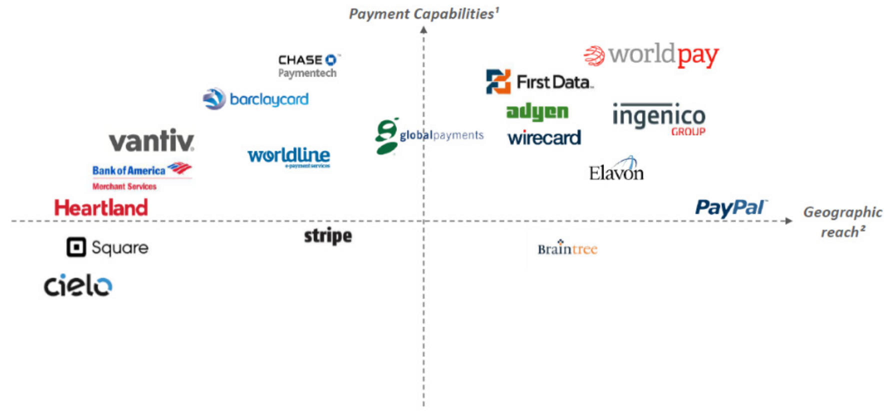
Source: Bryan, Garnier & Co ests.

Our DCF valuation puts the share price at 317p per share (upside of 1%).

3.2. Peer comparison: 285p

Worldpay's direct rivals are major global players such as First Data, Global Payments (in the process of acquiring Heartland Payment), Total System Services and Elavon. In local terms, its rivals are Chase Paymentech, Vantiv, BarclayCard, Worldline (in the process of acquiring Equens), Bank of America Merchant Services and Cielo. Finally, in the e-commerce segment, the group is up against Wirecard, Ingenico and Adyen. To a lesser extent, it can find itself competing with niche players such as Square, Stripe and Braintree.

Fig. 6: Payments players: know-how vs. geographical positioning



[1] Indicative representation of position across the value chain (hardware, merchant acquiring, issuer processing, eCom gateway, etc.); Omni channel capabilities (online and offline); value added services (analytics, risk and fraud, etc.)
[2] Indicative representation of number of countries where the player has an office, number of countries where transactions are processed (or number of currencies processed) and revenues allocation between regions or countries

Source: Company.

Despite this rich competitive backdrop, the group has no peer that has a totally similar profile to its own. In our view, First Data comes closest, with the slight difference that First Data's geographical positioning is far more US-focused, and a large share of transaction volumes processed by First Data stem from acquiring banks (e.g.: Bank of America, Wells Fargo, Lloyds) whereas Worldpay has direct contact with shop-owners. In the meantime, note that Worldpay states that it has no First Data's clients in its top 10.

Our sample is made of players exposed to payment services (they are all positioned in at least one acquiring and/or payments processing business, whether in-store or online), **or having a similar business model in payments.**

- **European players exposed to payment services:** Ingenico, Wirecard and Worldline.
- **US players exposed to payment services:** First Data, Global Payments, Heartland Payment, Total System Services, PayPal, Vantiv, but also Cielo (Latin America).
- **Payment card networks:** Visa and MasterCard, which have a similar business model to Worldpay (namely receiving commissions per transaction).

We have taken into account EV/sales (gross sales for players of Category 1 and net sales for players of Category 2), **EV/EBITDA and P/E multiples for 2016/17e.**

Fig. 7: Worldpay peer multiples (price on 29/01/16)

x	EV/sales 16e	EV/sales 17e	EV/EBITDA 16e	EV/EBITDA 17e	P/E 16e	P/E 17e
Ingenico Group	2.8	2.4	11.6	9.7	20.4	17.5
Wirecard	5.2	4.2	17.3	13.5	25.4	20.1
Worldline[1]	1.6	1.4	8.7	6.9	22.1	18.7
First Data	2.6	2.3	6.9	6.0	9.9	8.3
Total System Services	2.8	2.7	9.2	8.6	15.4	14.1
PayPal	3.6	3.0	13.6	11.0	24.3	20.4
Average of the Category 1	**3.1**	**2.6**	**11.2**	**9.3**	**19.6**	**16.5**
Worldpay	1.8	1.6	18.6	14.4	26.8	22.9
Worldpay vs. Category 1 Premium + / discount -	***-44***	***-40***	***66%***	***55%***	***37%***	***38%***
Global Payments	3.6	3.4	11.2	10.3	19.7	17.6
Heartland Payment	4.1	3.8	14.1	12.9	27.5	24.0
Vantiv	5.0	4.4	10.2	8.8	18.1	16.1
Cielo	5.4	4.8	11.4	10.1	15.7	13.7
Visa	8.9	8.0	12.8	11.3	26.4	22.8
MasterCard	8.7	7.9	14.8	13.2	24.1	20.7
Average of the Category 2	**6.0**	**5.4**	**12.4**	**11.1**	**21.9**	**19.2**
Worldpay	7.0	6.2	18.6	14.4	26.8	22.9
Worldpay vs. Category 2 Premium + / discount -	***17%***	***15%***	***50%***	***30%***	***22%***	***19%***
Worldpay vs. Categories 1 & 2 Premium + / discount -	***-13%***	***-13%***	***58%***	***42%***	***29%***	***28%***

[1] We have calculated Worldline's gross sales and have included the acquisition of Equens as of mid-May 2016.

Sources: Thomson Reuters; Bryan, Garnier & Co est.

Worldpay is trading on an **average premium of 22% relative to its peers in 2016/17e.** If we apply the average of EV/sales, EV/EBITDA and P/E multiples, **we value the Worldpay share at 285p/share** (downside of 9%).

In coming years, we believe Worldpay should benefit from the current investments in its proprietary platforms in organic terms. The group really started its investment plan in 2012 with a new data centre in London, and then over-ran in terms of both budget and completion times. The overall investment amount stands at around GBP500m with an end expected in early 2017e, although in the meantime this is weighing on D&A and capex. **The group could even make acquisitions** (generally it targets a region or a technology and theoretically has no target in sight in the short term while its financial position prevents it from making major acquisitions). **In contrast, growth in multiples at current levels seems to already reflect all potential welcome news likely over the next 12 months.**

3.3. Sum of the parts: 268p

In our view, the types of player that could be interested in a tech company providing payment services such as Worldpay are:

- Direct rivals or physical payments players who would like to have a multi-channel offering or extend their client base.
- Payment card networks or card issuers aiming to enhance their digital contents and expose themselves to greater risk.
- Advertising platforms/social networks looking for integrated payment solutions.
- Electronic wallet providers looking to change dimension.

Fig. 8: Potential buyers of a group like Worldpay

Who?	Direct competitors	Card network or issuing banks	Ad platforms/Social networks	e-wallets providers
Why?	Create/reinforce a multichannel offer	Increase digital mix (offense) and defend turf (defense)	Improve conversion	Add scale and global acceptance
Examples	Global Payment, First Data, Ingenico Group…	Global banks, Visa, MasterCard, Discover…	Facebook, Google, Microsoft…	PayPal, Alipay, Apple, Amazon, Google, Microsoft, Samsung…

Source: Bryan, Garnier & Co.

Note that in payment services, **recent transactions were based on EV/EBITDA of 15.2x** compared with **21.9x and 18.6x for Worldpay at current price in 2015e and 2016e**, respectively.

Fig. 9: Recent M&A operations in payment services

Date	Target	Acquirer	Country	EV (EURm)	EBITDA multiple (x)
Dec-09	Worldpay	Bain Capital/Advent	UK	2,030	8.2
Nov-09	Easycash	Ingenico Group	Germany	284	13.0
Apr-10	Mercury Payment Syst.	Sylver Lake	USA	726	14.8
Aug-10	DataCash	MasterCard	UK	520	19.5
Dec-10	Loyalty Partner	American Express	Germany	496	10.8
Jan-13	Ogone	Ingenico Group	Belgium	360	29.0
Feb-13	NetSpend	Total System Services	USA	1,400	14.6
Aug-13	Skrill	CVC Capital Partners	UK	600	12.0
Jan-14	PayPros	Global Payments	USA	420	19.1
Mar-14	NETS	Bain Capital/Advent/ATP	Denmark	2,300	12.4
May-14	Mercury Payment Syst.	Vantiv	USA	1650	17.7
Oct-14	DIBS	NETS	Sweden	790	17.9
Oct-14	GlobalCollect	Ingenico Group	Netherlands	820	16.4
Oct-14	TransFirst	Vista Equity Partners	USA	1,500	13.2
Mar-15	Skrill	Optimal Payments	UK	1,100	13.5
May-15	ICBPI	Bain Capital/Advent/Clessidra	Italy	2,150	11.0
Nov-15	Equens[1]	Worldline	Netherlands	1,490	11.8
Dec-15	Heartland Payment Syst.	Global Payments	USA	3,957	18.1
Average					**15.2**

[1] full price estimated i.e. cash out (Paysquare + transaction and reorganisation costs) and buyout of 100% of the JV (Equens Worldline).

Source: Bryan, Garnier & Co.

Note interestingly that **players active in bankcard issue processing are trading at 10-12x**, those in **physical merchant acquiring at 12-15x** (55% of Worldpay's EBITDA), **and pure-players in online payment at 15x+ and even increasingly 17x+** (45% of Worldpay's EBITDA).

Fig. 10: Sum of the parts

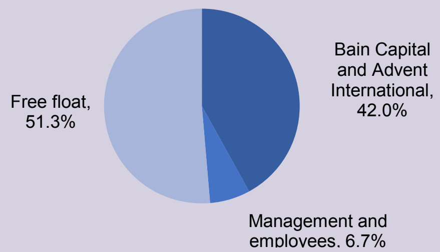
GBPm	2016e
Worldpay's EBITDA	**402.3**
EV/EBITDA for Physical Acquiring after a 12.5% premium (55% of Worldpay's EBITDA)	15.2x
EV/EBITDA for Online (45% of Worldpay's EBITDA)	17.8x
Weighted average (100%)	**16.4x**
EV	**6,587.7**
- Net debt	-1,232.1
Valuation	**5,355.6**
Number of shares fully diluted (m)	2,000.0
Per share (p)	**267.8**

Source: Bryan, Garnier & Co est.

We have applied EV/EBITDA multiples to the two major Worldpay businesses: **1/ the physical acquiring business** (Worldpay US and Worldpay UK), bearing in mind that we have applied a premium of 12.5% to this multiple given Worldpay's much-envied leadership position in the UK and **2/ the online business** (Global eCom). **With this SOTP, we value Worldpay at 268p per share** (downside of 14%).

Note that **private equity funds have been fairly active in the payments sector** accounting for a third of takeover operations over the past six years. In addition, Worldpay is itself **owned by US funds Bain Capital and Advent International, which acquired 80% of its capital in 2010 from RBS** for EV of GBP2.03bn (namely 3.9x sales and 8.2x EBITDA). RBS ended up selling on the remaining 20% in November 2013, enabling it to generate a capital gain of GBP161m. **Following the flotation, the fund still owns 42% of Worldpay's capital.**

Fig. 11: Breakdown of Worldpay shareholding structure following flotation



Source: Bryan, Garnier & Co est.

We expect the payments sector to continue consolidating in Europe and the US (especially in e-commerce), in a similar way to the hardware payments segment in recent years. For example, in 2007, around 20 manufacturers of payment terminals were active on a global level, whereas now only Ingenico and VeriFone really exist. The high growth enjoyed by Southeast Asia in the online segment in recent years is set to arrive in Europe and the US in coming years (2016/17e). **Ingenico, Wirecard, Worldpay and Worldline are among the natural consolidators that we identify in payment services** (primarily in the online segment for the first three and in physical payments for Worldline).

3.4. Recent IPOs in the sector

In addition to Worldpay's IPO (on 13th October 2015), we discuss below **the two recent flotations that have taken place in the payments sector, namely those of First Data** (mid-October) **and Square** (mid-November). All in all, we believe that **these operations reflect investor interest for stocks concerned with the payments and security themes** (primarily payment service providers, i.e. PSPs).

- **IPO of Worldpay:** see part 4.1 "From Streamline to Worldpay today".

- **IPO of First Data:** KKR started the process to list First Data on the stockmarket (8 years after its investment in the company, which was the largest in its history), and is to continue owning a majority stake after the operation. The group raised USD2.5bn on the market. Note that the US private equity fund bought First Data in 2007 via an LBO for around USD26bn (and even reinjected USD1.2bn last year). First Data (a spin-off from American Express in 1992) first made a name for itself by providing payment processing and technology services to merchants. However, since its takeover by KKR, just before the start of the financial crisis, the group ran into difficulties (hampered especially by debt of USD21bn). Since 2013, it has refocused in order to remain in the running in a payments backdrop that has changed massively. First Data notably acquired start-up company Clover (developer of a suite of cloud-based integrated products, to receive payments), which enabled it to win back market share with small shop-owners, Perka, which helps retailers manage their customer loyalty programmes, and start-up company Gyft specialised in gift cards. It also signed a partnership with Apple, supplying the group with the calculation technology behind Apple Pay. First Data seems to have ambitions in segments such as cyber security and data analytics. Note that it has already been listed in the past (between April 1992 and Sept. 2007).

  First Data was floated in mid-October at USD16 per share (vs. the estimated range reduced to USD16/17 per share compared with USD18/20 initially). First Data's current capitalisation stands at USD2.4bn.

Fig. 12: First Data 2014 figures

Company	**First Data**
Business	The company provides payments processing services and technology to merchants.
USDbn	**FY14**
Revenue	11.2
Y/Y change	*3.2%*
Underlying EBITDA	2.7
Margin	*8.7%*

Sources: Company; Bryan, Garnier & Co ests.

- **IPO of Square:** Note that Square is specialised in mobile payments. It had processed USD30bn in payment transactions in 2014. Square started an IPO project in early 2015 on a confidential basis. Indeed, companies with sales of less than USD1bn can present a flotation case to the SEC on a private basis. Flotation rumours had already started two years ago, and these have now materialised. The company raised USD243m on the market with the aim of covering its losses.

The flotation of Square took place in mid-November at a price of USD9 per share (vs. a range of USD11/13 per share and a price at its last private meeting at USD15.5 in 2014). Square's current capitalisation stands at USD272m.

Fig. 13: Square 2014 figures

Company	Square
Business	The company provides mobile payment (m-POS), data analytics, and financial/marketing services to merchants.
USDbn	**FY14**
Revenue	0.85
Y/Y change	*+54%*
Underlying EBITDA	-0.068

Sources: Company; Bryan, Garnier & Co ests.

4. WPG: from pioneer to established player

4.1. From Streamline to Worldpay today

Worldpay's history dates back to 1989 when it was still known as Streamline and was simply a PSP exposed to the UK whose business was primarily physical (in-store) electronic transactions. Streamline was the merchant acquiring division of NatWest in the UK. It played a driving role in the first deployment of the EMV standard for payment cards in this region. WorldPay was the division specialised in online payments and was one of the precursors (as of 1994) in this type of transaction processing in the UK. RBS merged with NatWest in 2000 and then acquired WorldPay in 2002 (renaming it RBS WorldPay at that time). Streamline and WorldPay then joined forces while functioning under distinct brands. During that year, WorldPay even ranked among the leading internet payment providers. Over the following eight years, the group expanded its business in organic terms and via acquisitions (e.g. Bibit in the Netherlands, Lynk and PaymentTrust in the US). In 2010, RBS WorldPay became the largest provider of payment processing solutions in Europe and one of the global leaders. At end-2010, RBS sold Worldpay to private equity funds Bain Capital and Advent International for GBP2.03bn (EV/sales of 3.9x and EV/EBITDA of 8.2x). During that year, it was the leading non-banking member of Visa Europe and MasterCard.

Fig. 14: Transformation from RBS Worldpay (2002) into Worldpay today

RBS Worldpay	Worldpay (now)	Conclusion/demonstration
Payments as a banking-led activity	Payments as a banking-led activity	⇨ Industry development
A division of a division	Innovative payments technology company	⇨ Clear strategy direction
Aging technology platform	Modern technology	⇨ Rebuilt leadership
Underinvested managed for cash	Highly invested for long-term growth	⇨ >GBP1bn invested
Strong customer heritage and global scale	Strengthened customer proposition	⇨ +2,500 people hired
First mover position in eCommerce	Problem solving culture	
=> Drifting	**=> 11% underlying EBITDA growth**	**=> Efforts to rectify the situation**

Sources: Company; Bryan, Garnier & Co.

Note that from **2010 to 2014, the group made seven acquisitions** for a total of GBP308m (including around 53% over 2012/14), bearing in mind that the **majority of these companies were loss making.** In all, Worldpay does not generally seek to buy sales, but rather to **equip itself with new regions and/or technologies that it lacks** (e.g.: Cobre Bem in Brazil and Century in the US).

Fig. 15: Worldpay acquisitions over the past 10 years (GBPm)

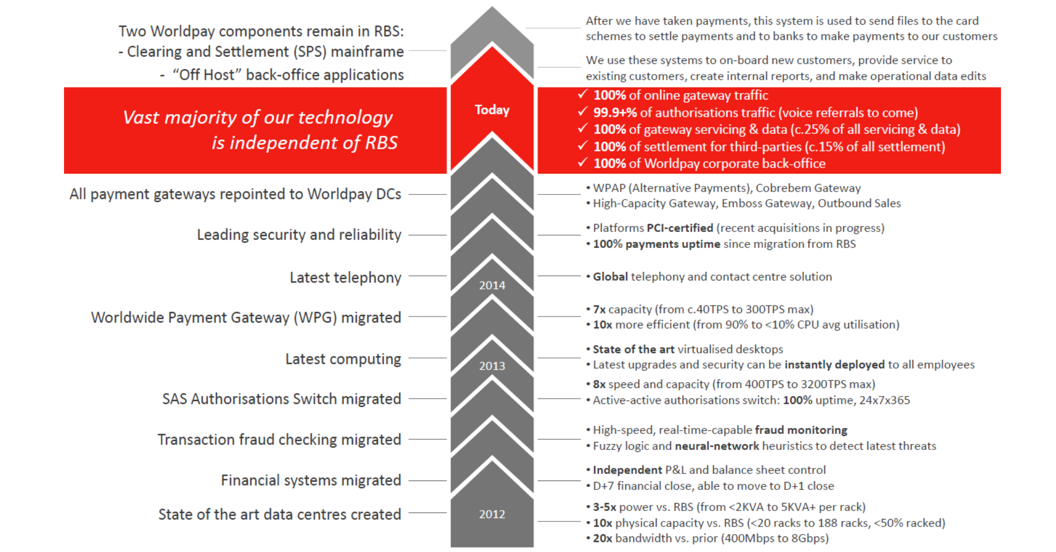
Date	Target company	Network	Geography	EV
2004	Bibit	Ecommerce	Netherlands	N/A
2004	Lynk	Local POS	US	288.5
2006	RiskGuardian	Ecommerce	US/UK	N/A
2006	PaymentTrust	Ecommerce	UK	N/A
2010	CardSave	Local POS	UK	71.0
2011	Envoy Services	Ecommerce	Global	74.0
2013	YESpay	Local POS	UK	23.6
2013	Century Payments	Local POS	US	54.5
2014	Cobre Bem Technologia	Ecommerce	Brazil	5.9
2014	Pazien	Ecommerce	US	3.5
2014	SecureNet	Omnichannel	US	75.3

Sources: Company; Bryan, Garnier & Co.

Last year, **on 13th October 2015, the Bain and Advent funds decided to list Worldpay on the LSE** in what was the largest IPO ever undertaken by a private equity company in the UK and the biggest seen since that of Royal Mail in 2013. **The group was floated at 240p per share** (range tightened to 235/250p vs 225/260p initially), representing a market capitalisation of GBP4.8bn. **Worldpay's current capitalisation is GBP6.3bn (EV of GBP7.6bn, i.e. 16% higher that Ingenico's presumed offer of GBP6.6bn)** and **the share entered the FTSE-100 on 18th December 2015.**

Worldpay ranks among the global leading independent providers of payments processing and acquiring services. Like a lot of players in the sector, **it has its own secure proprietary technological platforms (one dedicated to the UK and e-commerce on a global level and the other in the US)** enabling it to accept a wide range of electronic payments at merchants and to process transactions stemming from multiple channels around the world (physical, online and mobile). Since it has become independent, **Worldpay has invested more than GBP1bn in its business, including around GBP400m in technology** in a programme that genuinely kicked off in 2012 and is set to end in early 2017e, thereby naturally bloating D&A and capex over this period. The aim was to modernise its platforms, separate definitively from Royal Bank Scotland and prepare the future. **The group still has GBP100m to invest between now and the end of 2016e, or 20% of the total estimated budget of GBP500m.**

Fig. 16: Change in Worldpay technology (from 2012 to now)



Source: Company.

The group had clearly underestimated its project to separate its systems from RBS. At present, it remains dependent on RBS for the back office and clearing/settlement application (primarily for UK merchants).

Fig. 17: Worldpay's investment in its platform has over-run (time and costs)

Number of slippages	Cost estimated by Worldpay (GBPm)	Completion date estimated
Initial plan	200	-
1st postponement	320	2013
2nd postponement	395	2015
3rd postponement	500	2016

Sources: Company; Bryan, Garnier & Co.

This new infrastructure should primarily enable the group to be **more efficient** (faster, more powerful, more reliable and more secure) and to be able to **face higher transaction volumes for lower costs** (virtually zero marginal cost for a new transaction, low costs to enter a new region, and greater flexibility in absorbing activity peaks).

Fig. 18: Its proprietary platform is set to offer more functionalities

Global	Build for payments	Onmi-channel	Real-time	Data rich	Fast and elegant
Configurable for almost any geography, currency, region or combination	For diverse means of value exchange: cards, alternatives, crypto-currencies	Connections across multiple devices, applications or channels	Configuring for the internet age: real-time, event-driven and available	Deep, granular data at each step of the transaction, in a high capacity data store	Configurable at speed: fast to deliver new products and markets

Sources: Company; Bryan, Garnier & Co.

As such, Worldpay should be able to adapt to new projects and to forthcoming market changes.

Fig. 19: An architecture ready to attack new projects

Series 2 BINs	EU regulations	Australia – change of BINs
• MasterCard is introducing cards starting with a "2" instead of a "5"	• EU regulatory changes require extending IC++, IC capping, MSC rate capping and providing granular MI	• Our Australian scheme licences required BIN / ICAs to be changed
• Old platform had "5" hard coded into its rules requiring every line of code to be checked	• Old platform requires a fundamental code change	• Old platform required code change
• New platform has a simple table change	• New platform requires small changes in Clearing and Billing Engines	• New platform required table changes

Sources: Company; Bryan, Garnier & Co.

4.2. Understanding Worldpay's businesses

Worldpay is a fintech, or a software company operating in the payments field (a technology and solutions provider) destined for professionals (merchants). **Its core business is processing and acquiring card payment orders for merchants** (small/mid-sized merchants to large retailers). Its presence is both in-store and on payment gateways that enable acceptance of transactions of e-commerce websites. **On a secondary basis, it rents out EPTs, supplies risk management and fraud-prevention tools, as well as cash services** (management of currencies, by avoiding multiple banking stages and other useless costs) **and data analytics and optimisation services.**

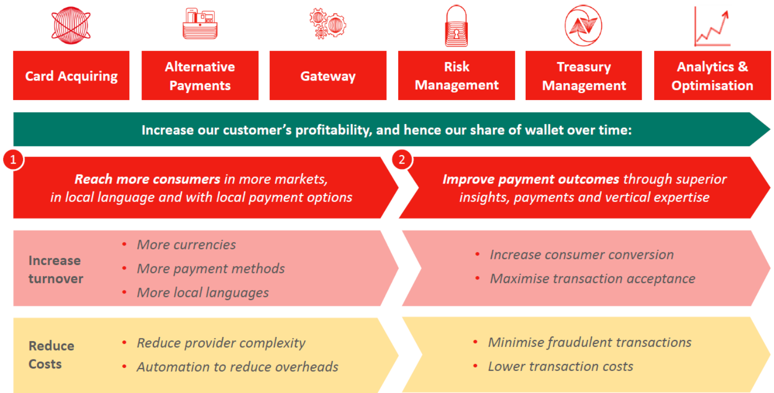
Fig. 20: Worldpay's positioning in the payments value chain

Issuing transaction processing	Services to cardholders and issuers	Automated clearing house	Credit/debit transfers	Services to merchants	Acquiring transaction processing	Commercial acquiring	Acceptance POS / ecommerce	Services to new digital businesses
				●	●	●	●	

Source: Bryan, Garnier & Co.

Worldpay has 30 years of experience in the payments field. It was a pioneer in card payments, multi-currency processing, online and contactless payment, and we believe it now boasts an **offer and a technology that provide a full response to issues for merchants,** who are looking for a multi-channel (or omnichannel) solution offering a secure and fluid purchasing experience. **The merchant's aim is to increase the potential of its commercial activity** (cross border acquisition capacity combined with domestic acquiring), **while controlling its costs** (improving the payment acceptance rate, reducing fraud and reducing transaction costs). **Concerning mobile payments and data analytics, we consider that Worldpay has a suitable level but is lagging behind the competition.**

Fig. 21: Worldpay's commercial offering today



Source: Company.

The group has headcount of around 4,500 (including some 1,200 engineers) in 25 offices spread between 11 countries in the Americas, Europe and Asia (UK, US, India, Canada as well as Brazil, Mexico, Argentina, Japan, China, Sweden, the Netherlands and Singapore). It boasts a **portfolio of more than 400,000 clients**, covers around 146 countries (including 50 where it is a local acquirer: this sometimes enables it to reduce interchange commissions and card schemes, and as well as to have very competitive solutions). It manages more than 126 transaction currencies, and enables acceptance for 326 alternative payment means (depending on the country and local jurisdictions). **Its network is capable of accepting payments on a regional scope representing more than 99% of global GDP.**

Fig. 22: Worldpay global network

Source: Company.

Worldpay is used to working with retail trade groups among the largest in the UK, as well as hundreds of thousands of small and mid-sized companies in the UK and the US (e.g. more than 16,000 hairdressers, more than 24,000 restaurants and more than 9,000 pubs in the UK), as well as international e-commerce companies. In 2014, it processed around GBP370bn, or 11.5bn transactions (31.5m/day), at an average value of GBP32.2/transaction.

Fig. 23: Worldpay performance indicators from 2012 to 2014

Metrics	2012	2013	2014
Total transaction (m)	9,020.0	9,905.0	11,476.0
Total transaction value (GBPbn)	316.7	343.1	369.5
Average transaction value (GBP)	35.1	34.6	32.2
Revenue as a percentage of total transaction value (%)	*0.97*	*0.98*	*0.98*
Net revenue as a percentage of total transaction value (%)	*0.23*	*0.23*	*0.23*
Card not present mix (%)	*37.2*	*39.5*	*40.9*

Sources: Company; Bryan, Garnier & Co.

The group's top 10 clients account for 11.5% of net sales (i.e. not taking into account interchange fees and payment scheme fees) while its top 50 clients account for 21.3%, **bearing in mind that none of these represents more than 3%.**

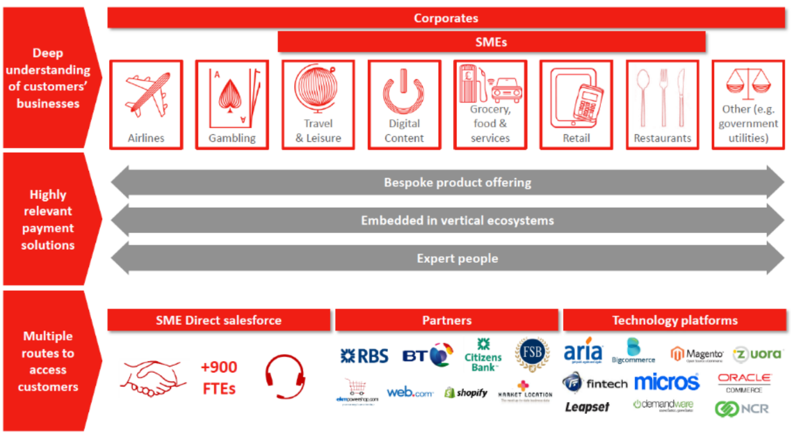
Meanwhile, note that **its major portfolio of existing clients is a source of recurrence** (clients for four years and over and generating 66% of gross sales) **and is captive** (net profit retention rate of more than 93% in 2014 on a group scale, including 99% for major clients and 99.3% in the e-commerce segment).

Fig. 24: Customers with a tenure of 4 years + generate 66% of total gross revenue

Customers with a tenure of	0-1 year	1-2 years	2-4 years	4 years+
% of gross revenue generated	4%	10%	20%	66%

Source: Company.

Fig. 25: A go-to-market approach on particular verticals



Source: Company.

The group stands out from other European PSPs for its **strong positions in the UK** (where it is leader) **and the US in in-store payment, bearing in mind that it is the largest e-commerce player in continental Europe** (ahead of pure player Wirecard). We estimate that **Worldpay only**

addresses 40% of the potential portfolio of its clients, in view of dual sourcing rules generally practiced in payment services.

Worldpay has three operating divisions:

- **Worldpay UK (34% of sales and 40% of 2014 underlying EBITDA):** Worldpay has the leading market share in the UK (around 42%e of card payments in the UK, based on the volume of in-store transactions in 2014). It supplies payment acceptance solutions in-store and online (by computer and mobile phone) and for mobile payments for around 300,000 clients based in Ireland and the UK. Its service addresses both major groups (Tesco, Asda etc.) and small/mid-sized and micro companies. This division accounted for 34% of the group's overall sales in 2014 while net underlying sales rose by 9.5% on a CAGR basis over the past three years. **Its main rival in this region is Barclays.**

- **Worldpay US (46% of sales and 19% of 2014 underlying EBITDA):** Worldpay supplies payment acceptance solutions in-store and online (by computer and mobile phone) and in mobile payments for clients based in the US. Its service addresses merchants based in the US, with a specialisation in integrated payment solutions for small/mid-sized companies (around 91,000 clients) and specific vertical solutions for around 11,000 clients (food stores, oil ships, catering and retail trade industries). This division accounted for 46% of the group's total sales in 2014 while net underlying sales rose by a CAGR of 2.9% (4.9% lfl) over the past three years. **Its main rival in this region is Chase.**

- **Global eCom (20% of sales and 41% of 2014 underlying EBITDA):** Worldpay's clients are major high-growth multinationals present in internet trade (e-commerce). It manages their complex requirements in terms of payments (simplifying online payments and creating a rapid and secure purchase experience), enabling them to accept card payments and alternative payment means on e-commerce sites (validation and settlement), and supplying a wide range of multi-currency services (enabling reduction of up to 85% in the costs associated with international payments vs. classic circuits). The lion's share of the near 1,600 clients in this division are based in five sectors (Worldpay focuses on 70% of the market): digital content (25% of net 2014 sales, market share of 2%), the retail trade (19%, market share of 49%), airline companies (18%, market share of 7%), regulated games (17%, market share of 49%) and travel (7%, market share of 6%). This division accounted for 20% of the group's overall sales in 2014 while the CAGR in underlying net sales stood at 16.8% over the past three years. **Its main European rivals in this business are Ingenico Group and Wirecard.**

Fig. 26: Description of three Worldpay divisions

FY14	% of sales	% of underl. EBITDA	Description	Main Competitor
Worldpay UK	34	40	• UK market leading multi-channel merchant acquirer and processor. • It provides local in-store, online and mobile payment acceptance solutions for UK-based merchants from large corporates to SMEs.	Barclays
Worldpay US	46	19	• US multi-channel merchant acquirer and processor. • It provides local in-store, online and mobile payment acceptance solutions for US-based merchants, with a focus on integrated payments for SMEs.	Chase
Global eCom	20	41	• Provider of global internet payments solutions supporting payment to customers in different currencies (wide selection of potential electronic payment types in the global market). • It serves large and fast growing internet-led multinationals with complex payment needs.	Ingenico Group, Wirecard
Total	**100**	**100**	**Provider of payments processing solutions to merchants**	**First Data**

Sources: Company; Bryan, Garnier & Co.

In its core business, Worldpay collects a commission fee from the merchants and books it as sales (gross sales). This includes its own commission fee (for being acquiring and processor) as well as fees for the consumer's bank and the card network. It also receives revenues associated with the sale of its risk management and currency tools and other value-added services.

Fig. 27: Revenue sources by business from 2012 to 2014

GBPm	2012	2013	2014
Transaction service charges	**2,755.5**	**3,007.1**	**3,209.7**
Y/Y change	-	*9.1%*	*6.7%*
Terminal rental fees	**63.5**	**69.2**	**67.6**
Y/Y change	-	*9.0%*	*-2.3%*
Float income	**5.1**	**2.5**	**2.1**
Y/Y change	-	*-51.0%*	*-16.0%*
Foreign exchange charges	**85.2**	**99.3**	**108.6**
Y/Y change	-	*16.5%*	*9.4%*
Other ancillary income (e.g. gateway services and alternative payments)	**167.3**	**200.4**	**238.6**
Y/Y change	-	*19.8%*	*19.1%*
Total revenue	**3,076.6**	**3,378.5**	**3,626.6**
Y/Y change	-	*9.8%*	*7.3%*

Sources: Company; Bryan, Garnier & Co.

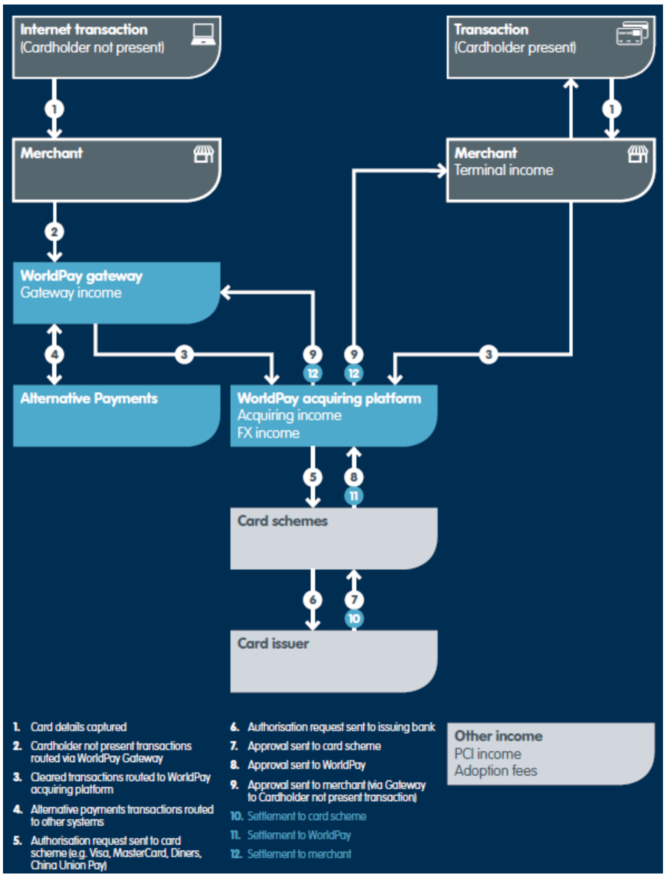
Reasoning on the group level as a whole, we calculate that **Worldpay received an average merchant service fee of 0.98% of the value of each transaction processed in 2014** (classic sales, which corresponds to gross sales) including its own commission fee of 0.23% (net sales). **Note importantly, that the majority of players reason in terms of gross sales, which serve as a basis for calculating their profitability margins.** See section 4.3 "Traps to avoid when analysing figures".

Fig. 28: Sales model and average commissions at Worldpay

GBPm	2012	2013	2014
Transaction volume processed	**316,700**	**343,100**	**369,500**
Y/Y growth	-	*8.3%*	*7.7%*
Revenue (gross revenue)	**3,076.6**	**3,378.5**	**3,626.6**
Y/Y growth	-	*9.8%*	*7.3%*
Y/Y organic growth	-	*8.8%*	*9.2%*
Average fee per transaction processed *(merchant service fee)*	***0.97%***	***0.98%***	***0.98%***
Net revenue (revenue retained by Worldpay)	**717.4**	**800.1**	**863.4**
Y/Y growth	-	11.5%	7.9%
Y/Y organic growth	-	*9.9%*	*6.3%*
Average fee retained by Worldpay *(merchant services fee - interchange and scheme fees)*	***0.23%***	***0.23%***	***0.23%***

Sources: Company; Bryan, Garnier & Co.

Fig. 29: Worldpay business model during a transaction (in-store and online)



Source: Company.

Worldpay is currently the **leading merchant acquirer in the UK and in Europe** (thanks notably to its market share in the UK). It also ranks **world no. 5** among establishments enabling merchants to accept bankcard payments, including **no. 9 in the US.** Finally, in **e-commerce, we estimate the group is the global leader as well as the European leader** (just ahead of Wirecard).

Fig. 30: Ranking of Worldpay in acquiring and e-commerce

Worldpay	Ranking in acquiring	Market share (%)	Ranking in ecommerce	Market share (%)
Worldwide	#5	5%	#1	6%
Europe *(of which UK)*	#1 *(#1)*	20% *(42%)*	#1 *(N/A)*	20% *(N/A)*
US	#9	3%	N/A	N/A

Source: Bryan, Garnier & Co ests.

As an acquirer, note importantly that Worldpay carries a more or less significant reimbursement risk. This could happen if the merchant or settlement banks fail to meet their contractual obligations (for merchants, this risk is higher in businesses that promise future deliveries rather than supply at the time of payment) or to reimburse the payments associated. Take for example a billing dispute between a buyer and a merchant, the resolution of which does not favour the merchant. In this case, the operation contested is booked to the merchant's bank and credited/reimbursed to the consumer. If Worldpay or its sponsor banks are incapable of reimbursing via the merchant's account (or a reserve account, if necessary), or if the merchant refuses or is financially incapable (for example in the event of bankruptcy) of reimbursing its bank, Worldpay would have to shoulder the loss. **The group itself values its eventual risk (at any time) at around GBP3bn.**

We estimate Worldpay's direct rivals are global players such as First Data, Global Payments and Elavon. In local terms, it is often up against Chase Paymentech, Vantiv, BarclayCard, Bank of America Merchant Services, Cielo and Worldline. Finally, in the e-commerce segment, it faces Wirecard, Ingenico Group and Adyen. To a lesser extent, the group can find itself competing with niche market players such as Square, Stripe and Braintree.

Fig. 31: Competitive intensity in Worldpay's businesses

BUs	Global Ecommerce	UK		US	
Competitors		SME	Corporate	SME	Corporate
Worldpay	●	●	●	●	●
Ingenico Group	●	-	○	-	-
Elavon	○	○	●	●	●
Wirecard	○	-	-	-	-
First Data	○	●	●	●	●
Global Payments (incl. Heartland)	○	●	○	●	○
Worldline (incl. Equens)	-	-	-	-	-
Chase Paymentech	●	-	-	●	●
Vantiv	○	-	-	●	●
Bank of America Merchant Serv.	○	-	-	●	●
Cielo	○	-	-	●	-
Barclaycard	○	●	●	-	-
Square	-	-	-	●	-
Stripe	-	○	-	●	-
Adyen	●	-	○	-	-
Braintree	○	-	-	○	-
PayPal	-	○	-	○	-

● *Frequent* ○ *Occasional* - *Rare*

Sources: Company; Bryan, Garnier & Co.

4.3. Traps to avoid when analysing figures

The consensus does not seem to take account of the accounting and reporting differences that exist between payments players (particularly in terms of revenue recognition in the merchant acquiring segment). These differences are important however, since **with no adjustments, they can make profitability margin comparisons invalid and the choice of market multiples irrelevant.** Finally, while some expect a strong financial impact from Worldpay's stake in Visa Europe (which has been bought by Visa Inc), they are likely to be disappointed.

4.3.1. Gross sales and EBITDA (rather than net sales and underlying EBITDA)

Recognition of Worldpay's revenues is similar to the majority of European players we cover, i.e. they all publish gross sales (which we call "sales"). Like rivals Ingenico and Wirecard, the group books under this line the merchant's commission fee (this includes its acquiring, processing fee, interchange fees to go to the consumer's bank and fees to be paid to the payment network). **In contrast, the net sales line** (which only includes its own commission fees) **is not provided by other European companies and as such, is not relevant for comparison** (it is more similar to a gross margin). In addition, **before its IPO, the group only reported "underlying revenue", corresponding exactly to its current "gross revenue"** (see 2014 annual report available on the Worldpay website).

Fig. 32: The majority of European payment players reason in terms of gross revenue

Gross revenue	Net revenue
Fee retained by the acquirer	Merchant service fee
+ Fee paid by the acquirer to the issuer (interchange fee)	- Interchange fee
+ Payment network fee	- payment network fee
= Merchant service fee	**= Fee retained by the acquirer**

Source: Bryan, Garnier & Co ests

As such, it seems essential to us to calculate Worldpay's profitability based on gross sales and not net sales, which artificially boost its margin rate and make comparison with other European players in the sector inappropriate. Indeed, **this avoids risky margin comparisons that we have noted among the consensus** (especially with players we cover such as Ingenico Group, Wirecard and Worldline), and the ensuing false conclusions.

Finally, **we prefer to look at the real EBITDA reported by the group rather than underlying EBITDA.** Worldpay tends to communicate on underlying EBITDA, but **in our view, the numerous negative items that this excludes** (cost of platform separation, reorganisation, costs linked to acquisitions: 32% of 2012 underlying EBITDA, 49% in 2013 and 24% in 2014) **should be adjusted for solely at the EBIT level (namely underlying EBIT).** This is what the group's rivals do and what we have been used to analysing in accounts for companies in the sector.

Fig. 33: Adjustments made to switch from EBITDA to underlying EBITDA and EBIT to underlying EBIT

GBPm	2012	2013	2014
Underlying EBITDA	**304.5**	**345.6**	**374.7**
Separately disclosed items affecting EBITDA:			
- Platform costs	*-41.5*	*-41.3*	*-35.1*
- Other separation costs	*-10.3*	*-19.4*	*-24.1*
- Reorganisation and restructuring costs	*-24.0*	*-46.3*	*-18.2*
- Costs associated with business set-ups, acquisitions and disposals	*-6.8*	*-44.1*	*-2.8*
- Other	*-15.3*	*-17.5*	*-8.4*
EBITDA	**206.6**	**177.0**	**286.1**
Underlying D&A	-58.6	-68.6	-78.4
Separately disclosed items affecting D&A:			
- Impairment of platform assets	*-*	*-14.3*	*-9.6*
- Amortisation of business combination intangibles and impairment of other intangibles	*-74.3*	*-74.1*	*-73.1*
EBIT	**73.7**	**20.0**	**125.0**
Underlying EBIT	**245.9**	**277.0**	**296.3**

Source: Company.

4.3.2. Limited impact to expect from the acquisition of Visa Europe

In terms of Worldpay's stake in Visa Europe, following its acquisition by Visa Inc, we have tried to find out whether we should expect a significant positive impact on its figures. Note that in early November 2015, Visa Inc agreed to buy 100% of its European sister-company for an amount of up to USD23.4bn (around EUR21.2bn). Behind this deal to pool the global networks, Visa's aim is to catch up on the delays accumulated in recent years relative to MasterCard by increasing its client base and facilitating the use of its products throughout the world. Visa Europe had market share of 52.2% in 2013. Indeed, the two entities combined manage payment volumes of around USD6.500bn a year, spread over 2.9bn cards in circulation.

Reintegrating this subsidiary is set to cost Visa Inc at least EUR16.5bn (of which EUR11.5bn in cash and EUR5bn in Visa shares), **to which some EUR4.7bn in various premiums could be added** (depending on results obtained over the next four years). In order to finance the share of the operation payable in cash, Visa is to issue bonds for USD15-16bn (or leverage of between 1.4 and 1.5x overall EBITDA, which is pretty reasonable), thereby also enabling it to increase the buyback programme for ordinary A shares by USD5bn in 2016 and 2017 in order to compensate for the impact of preferential share issues. **Worldpay is the main non-banking member of Visa Europe,** whose capital is owned by 3,000 European financial institutions including Worldpay (~5.9%), Barclays (~5.7%), Lloyds (~4.2%) and Wirecard (~0.5%).

The disposal of the near 5.9% stake owned by Worldpay is to go ahead at a maximum amount of EUR1.25bn:

- The disposal is due to be completed during Q2 2016e.
- Owners of guaranteed value certificates (a distinct category of shares) will have the right to 90% of the net disposal gain in compliance with the terms of these certificates (subject to the company's certificate conservation policy), with Worldpay retaining 10% of the net gain.
- The terms of the disposal mean the amount received will be a mixture of cash and other non-cash amounts for a total estimated value of up to EUR1.249bn, including deferred conditional payments: 1/an initial overall amount estimated at around EUR966m (including an amount in cash of EUR593m, and the privileged B series Visa Inc shares convertible into ordinary A series shares for an amount of around EUR374m), 2/ a deferred payment estimated at around EUR283m, the payment of which is conditional on reaching certain criteria relative to Visa Europe's additional net revenue during the 16 tax quarters post-disposal.
- Following the disposal, Worldpay is to remain a member of the Visa payment system, but will no longer have a representative on Visa Europe's board.

In all, we estimate that the impact on Worldpay's accounts should be positive but very limited. Indeed, Bain Capital and Advent International are to receive 90% of the net disposal gain (or a maximum of EUR1.124bn), whereas Worldpay is only set to receive 10% (namely an impact on its accounts of EUR124.9m maximum, or ~1,5% of its current market cap, bearing in mind that the amount will not only be in cash). **The group does not yet know the exact timing and will have to review the situation with its auditors in order to see how the deal is to be handled on the accounting front.**

4.3.3. What multiples should we look at? And why?

In terms of the valuation multiples that we should look at, **we believe that investors should focus on Worldpay's EV/sales and EV/EBITDA multiples until the end of its investment plan** (a further GBP100m remains to be invested until early 2017e, out of a total of GBP500m). Indeed, we believe that the PSPs modernising their infrastructure (this type of investment is key in the sector) should not be penalised, and as such, we have left to one side EV/underlying EBIT and P/E multiples that are inflated throughout this period. We have used exactly the same method for Worldline, which is in the same investment situation (a further EUR38m is still to invest in its Wipe modular platform out of a total EUR170m over 2007-17e). **In contrast, as of 2017e, the time should be right to reason in terms of PEG for Worldpay** (comparing P/Es with EPS growth), **as we do for Ingenico and Wirecard**, who have no major programmes underway.

Fig. 34: Comparison of European payments players (iso-reporting 2016e)

FY16e (m – local currency)	Worldpay (Neutral, 290p)	Wirecard (Buy, EUR52)	Worldline[1] (Buy, EUR29)	Ingenico Group (Buy, EUR150)
Revenue (i.e. gross revenue)	**4,280.0**	**1,005.6**	**1,509.5**	**2,444.2**
LFL growth	*7.0%*	*20.8%*	*4.8%*	*11.7%*
EBITDA	**402.3**	**304.3**	**282.7**	**580.5**
Margin	*9.4%*	*30.3%*	*18.7%*	*23.8%*
Underly. EBIT	**376.6**	**269.1**	*202.5*	**507.2**
Margin	*8.8%*	*26.8%*	*13.4%*	*14.4%*
Rest. attrib. net income	**233.8**	**225.9**	**133.2**	**327.9**
Margin	*5.5%*	*22.5%*	*8.8%*	*13.4%*
Payout ratio	***25.0%***	***8.6%***	***25.0%***	***35.0%***
FCF/Underly. EBIT	***30.9%***	***43.6%***	***65.3%***	***68.4%***
Gearing	*146.7%*	*-33.9%*	*-49.1%*	*5.9%*
EV/sales (x)	**1.8**	**5.2**	**1.6**	**2.8**
EV/EBITDA (x)	**18.6**	**17.3**	**8.7**	**11.6**
P/E (x)	**26.8**	**25.4**	**22.1**	**20.4**

[1] We have consolidated Equens as of mid-May 2016, and we have restated its gross revenue to have a similar accounting to that of Worldpay, Ingenico Group and Wirecard.

Sources: Bryan, Garnier & Co ests.

4.4. Improvement in profitable growth

Worldpay is benefiting from very structuring changes, namely the rising trend towards electronic payments, e-commerce and demand for fluid and secure solutions (payment platforms for merchants and purchasing experience for customers) irrespective of the channel used or the payment means. **The group has managed to adapt to changing behaviour patterns** (clients increasingly connected to the internet and on mobile devices), **to the highest security standards** (PCI DSS certification on its international services platform) **and to regulations** (its geographical coverage and various partnerships enables it to offer solutions adapted to each country). All these factors, combined with its **knowledge of the UK and US markets and e-commerce throughout the world** (the majority of Worldpay's sales is based on the commercial relations it has with merchants) together with economies of scale via the volume of transactions handled by its proprietary platforms (gradually, as we approach the end of its investment programme, early 2017e), should contribute to **growth in underlying EBIT margin even with no acceleration in sales growth (+100bp over 2014/17e vs 20bp over 2012/14).**

4.4.1. A quick look in the rear-view mirror

Worldpay's fundamentals are not very impressive for the payments sector (in terms of lfl sales growth as well as profitability and free cash flow), **due to: 1/** its strong positions in physical merchants in the UK and the US (80% of its 2014 sales), which are difficult markets, **2/** a lack of critical mass in the US, which prevents it from generating a strong leverage effect (fragmented market), **3/** investments in its proprietary platforms that have over-run for some years and are continuing to weigh on its figures (this should be the case until 2016e) and **4/** an ensuing low transformation rate for underlying EBIT into free cash flow. **In contrast, the group's strengths lie in its: 1/** historically resilient organic sales growth (in line with the change in the number of electronic transactions and the high client retention rate), **2/** clear leadership position in physical payments in the UK (size effect enabling it to outperform local GDP growth), **3/** pioneering status in e-commerce with a leadership position in this high-growth market (in Europe and throughout the world) and **4/** focus on innovation and development (investment in the technological platforms, acquisitions and recruitment etc.), which should end up paying off over the medium term (operating leverage and then in terms of FCF).

Fig. 35: Worldpay's sales slightly underperformed the market in 2013/15

CAGR	2013-15e
Debit card	11%
Credit card	8%
Other Card	4%
=Total non-cash transaction (in value)	**9.2%**
Worldpay's organic growth	***8.3%***

Sources: Euromonitor International (data for UK, US, Canada, Japan, Brazil, France, Germany, Netherlands, Italy and Spain i.e. 75% of global transactions reported; Other card includes charge card, pre-paid and store card transactions); Bryan, Garnier & Co ests

Fig. 36: Main financial line items from 2012 to 2014

GBPm	2012	2013	2014
Revenue	**3,076.6**	**3,378.5**	**3,626.6**
Y/Y change	*2.6%*	*9.8%*	*7.3%*
Y/Y change (lfl)	-	*8.8%*	*9.2%*
Net revenue	**717.4**	**800.1**	**863.4**
Y/Y change	-	*11.5%*	*7.9%*
Y/Y change (lfl)	-	*9.9%*	*6.3%*
Underlying EBITDA	**304.5**	**345.6**	**374.7**
Margin	*9.9%*	*10.2%*	*10.3%*
EBITDA	**206.6**	**177.0**	**286.1**
Margin	*6.7%*	*5.2%*	*7.9%*
EBIT	**73.7**	**20.0**	**125.0**
Margin	*2.4%*	*0.6%*	*3.4%*
Underlying EBIT	**245.9**	**277.0**	**296.3**
Margin	*8.0%*	*8.2%*	*8.2%*
Attrib. net profit	**-55.5**	**-164.8**	**-50.0**
Margin	*-1.8%*	*-4.9%*	*-1.4%*
Rest. attrib. net profit	**68.8**	**93.6**	**91.7**
Margin	*2.2%*	*2.8%*	*2.5%*
EPS	**-0.48**	**-1.42**	**-0.03**
Y/Y change	-	*ns*	*ns*
Rest. EPS (fully diluted)	**0.59**	**0.81**	**0.06**
Y/Y change	-	*36.0%*	*-92.9%*
FCF	**28.0**	**-60.9**	**0.7**
Net debt	**1,368.3**	**2,055.1**	**2,254.1**
Gearing	**293.2%**	**-1,474.2%**	**-1,173.4%**

Sources: Company; Bryan, Garnier & Co.

In the payments sector in the wider sense, players need to remain innovative and modernise their platforms in order not to become distanced or to underperform their market. **In recent years, Worldpay has invested a lot, whether in its three operating divisions or in separating its technological platforms** in order to be definitively independent from RBS. The growth drivers and operating leverage that have enabled it to rank among the major PSPs, both in Europe and more generally throughout the world, are set out in the two tables below.

Fig. 37: Worldpay sales growth drivers over the past five years

	Last five years
Highly recurring revenue	• Customer proposition drives very high recurring revenues. • Extremely sticky customer base with high retention (net income retention rate of 93% for the group, incl. 99.3% in Global eCom) and limited customer concentration (top 50 = 21% of its 2014 net revenue) generating steady growth in transaction volumes.
Robust organic growth profile	• Large, growing and evolving market driving robust demand. • Broad footprint supports sustained organic growth.
Growth through proven M&A capabilities	• Strategic expansion of footprint, distribution and technological capability • Strategic focus on capabilities/presence rather than exclusively platforms.

Sources: Company; Bryan, Garnier & Co.

Fig. 38: Worldpay operating leverage over the past five years

	Last five years
Strong margin profile	• Robust margin profile despite significant internal investment in standalone operations.
Operating leverage drives earnings growth	• Significant growth in costs as technology capability and business infrastructure developed to support growth.
Capital efficient mode drives FCF conversion	• Significant capital expenditure to upgrade and separate new processing platform to facilitate future growth.

Sources: Company; Bryan, Garnier & Co.

While Worldpay has already activated drivers and levers, we see later on that **the investments it has made in recent years** (and which have weighed on its figures) **should enable it to activate fresh ones and thereby improve its profitable medium/long-term growth and hence its FCF generation** (so far penalised by capex in its platforms).

4.4.2. An unsurprising H1 2015

Over the first half of 2015, Worldpay reported sales of GBP1.940bn (+13.0% over one year, or +8.3% at cc and +7.4% lfl) including **net sales of GBP465.7bn** (+13.4%, of +10.7%e same-currency and +9.4% lfl). The volume of transactions processed (which is the key indicator for PSPs in our view) rose by 10.8% to GBP194.6bn. In terms of profitability, **EBITDA stood at GBP148.2m (margin of 7.6%, +60bp), underlying EBITDA at GBP182.6m (margin of 9.4%,** stable over one year in view of the recruitments made) **and underlying EBIT at GBP148m (margin of 7.6%,** +40bp). In contrast, **EBIT margin stood at 3.9% (**virtually half the amount of underlying EBIT margin), still penalised by the technological separation from Royal Bank Scotland and reorganisation/restructuring costs (capex at around 2% of sales and 7% of net sales). In all, its **attributable net profit came in at GBP3.1m** (margin of 0.2%) **and net debt at GBP2.291bn** (vs. GBP2.254bn at end-December 2014).

Fig. 39: H1 2015 revenue and underlying EBITDA margin[1] by division

GBPm	Revenue		Change	Change	Transaction value		Change	Underlying EBITDA margin		Change
BUs	**H1 2014**	**H1 2015**	**Y/Y**	**Y/Y (lfl)**	**H1 2014**	**H1 2015**	**Y/Y**	**H1 2014**	**H1 2015**	**Y/Y**
1/ Worldpay UK	571.5	553.5	-3.1%	-3.1%	93	98	5.4%	11.2%	14.2%	+300bp
2/ Worldpay US	788.6	967.6	22.7%	10.3%	42	48	14.3%	4.0%	2.9%	-110bp
3/ Global eCom	357.3	419.2	17.3%	14.7%	41	49	19.5%	21.0%	20.3%	-70bp
Total Group	**1,717.4**	**1,940.3**	**13.0%**	**7.4%**	**176**	**195**	**10.8%**	**9.4%**	**9.4%**	**0.0bp**

[1] The group does not provide the EBITDA margin breakdown

Sources: Company; Bryan, Garnier & Co ests[1].

The three divisions did not perform equally during H1. Note especially:

- **Worldpay UK (sales down 3.1% and underlying EBITDA margin at 14.2%):** the cut in interchange commissions in the EU started to impact Worldpay's UK division (-9.2% impact), bearing in mind that it will have a 12-month impact for the first time in 2016. Although the UK market is difficult, Worldpay benefits from its leadership status, which enables it to generate healthy margins relative to its rivals.

- **Worldpay US (sales up 10.3% lfl and underlying EBITDA margin at 2.9%):** profitability was affected by the integration of SecureNet in accounts (loss-making company with **underlying EBITDA** of GBP3.3m in H1 2015). Since the US market is very competitive and Worldpay does not have the necessary critical mass in the region, its profitability is lower.

- **Global eCom (sales up 14.7% lfl and underlying EBITDA margin at 20.3%):** high growth in the volume of transactions processed (+41%) drove sales. Indeed, volumes more than offset the decline in the average value of transactions thanks to the rising size of the online market (especially the share stemming from emerging markets: Asia-Pacific and Latin America). We estimate that Worldpay has normal average sales growth and margins in e-commerce.

4.4.3. Our scenario for 2015-17e

Worldpay has not provided 2015 guidance, but figures for the medium/long term. The group is targeting a CAGR in organic net sales of between 9 and 11% and intends to benefit from its new driver in transaction acquiring, the rising contribution from its Global eCom business and the gradual reduction in exceptional items (if not an eventual end). However, Worldpay will not stop investing since it should continue to **underpin its growth and innovation (capex of around 2% of sales, namely 10-12% of net sales).** We also understand that if it made any gains from lower interchange fees (often large retailers request that the entire reduction is passed onto them, whereas smaller merchants are less aware and have less negotiating clout), it would reinvest them. Finally, **once the construction of its more integrated network is complete and hence, more efficient, the group hopes to make the most of natural cross selling and up selling between its divisions** (it could notably focus its sales offering on its ability to provide end-to-end payment solutions).

Fig. 40: Worldpay medium-term guidance

Metrics	Guidance
Net revenue growth and operating	• Targeted net revenue growth of 9-11% CAGR over the medium to longer term, with potential for meaningful future operating leverage driven by several factors including nearer term items ceasing to impact the ability to realise such leverage (including PLC costs, transfer of some SDI costs into Opex as headcount is reallocated), completion of platform build and the positive mix effect of Global eCom.
PLC costs	• Near term assumption of GBP3-7m per annum. • Medium term assumption of GBP10-12m per annum.
Depreciation & Amortisation	• In the context of the investment profile, D&A is expected to trend towards normalised capex level in the medium term.
Tax rate	• Accounting tax rate of initially c.28% falling to 23% over the long term. • Cash tax rate generally in line with accounting taxes.
Capex	• With the migration to the new acquiring platform, capex is expected to decline from 16-20% of net revenue in line with historical levels in the medium term down to 10-12% at normalised levels • Maintenance and mandatory capex estimated to be 30-40% of normalised total capex spend
Separately disclosed items	• SDIs affecting EBITDA expected to be eliminated with completion of separation. • SDIs related to non-cash amortisation of business combination intangibles expected to decline from GBP73m in 2015 to c.GBP50m in 2016 and 2017, and continue thereafter at c.GBP40m

Source: Company (given in July 2015, pre-IPO).

Fig. 41: Strategy to deliver targets

	Next five years
Continue to power SME and Enterprise commerce	• Win new merchants and partners. • Grow revenue per customer. • Enhance margins through value delivery. • Increase revenue stickiness.
Leverage deep specialist vertical focus across current and new markets	• Trusted advisor to merchants. • Grow market share. • Increase addressable market.
Drive innovation and product development	• Culture of problem solving for merchants. • Use scale to maintain R&D competitive advantage. • Maintain market position.
Realise full potential of operating model	• Deliver operating leverage. • Significant free cash flow generation.
M&A	• Incremental value creation from proven acquisition strategy. • Execute on proactive, focused target list.

Sources: Company; Bryan, Garnier & Co.

In our model, we are forecasting sales of GBP4bn for 2015e (+10.3% over one year and +7.0% lfl) **and GBP4.230bn for 2016e** (+7% lfl), namely in the middle of the group's range for a CAGR rate in net sales of 9-11% (BG: +10.2% on average over 2015/16e). **The average merchant service fee collected by Worldpay should be 0.98% in 2015e** (we reason on a group average basis since it is very difficult to reason by business given the extent to which the businesses are integrated). We are therefore forecasting an **ongoing healthy level for this fee** (like its history: from 0.97% in 2012 to 0.98% in 2017e) since the decline in the average value of transactions should be more than offset by the increase in volumes (via Apple Pay, connected watches, the decline in interchange fees etc.) and the smaller secondary activities (risk management, fraud protection, cash services etc.) generally have an accretive impact.

Fig. 42: Worldpay average commission (as a % of the transaction processed)

GBP	2014	2015e	2016e	2017e
Revenue (m)	**3,626.6**	**4,000.0**	**4,280.0**	**4,622.4**
Y/Y growth	*7.3%*	*10.3%*	*7.0%*	*8.0%*
Y/Y organic growth	*9.2%*	*7.0%*	*7.0%*	*8.0%*
Transaction volume processed (bn)	**369.5**	**406.5**	**438.8**	**471.7**
Y/Y growth	*7.7%*	*10.0%*	*8.0%*	*7.5%*
Fee per transaction processed (merchant service fee)	**0.98%**	**0.98%**	**0.98%**	**0.98%**
Net revenue (m)	**863.4**	**974.3**	**1,072.1**	**1,179.7**
Y/Y growth	*6.3%*	*10.3%*	*10.0%*	*10.0%*
Y/Y organic growth	*7.9%*	*12.8%*	*10.0%*	*10.0%*
Worldpay's own fee *(merchant services fee - interchange and scheme fees)*	**0.23%**	**0.24%**	**0.24%**	**0.25%**

Source: Bryan, Garnier & Co ests.

Fig. 43: Normal average growth in sales in coming years, by division

	Worldpay UK	Worldpay US	Global eCom
Ifl revenue growth	5%+	5/8%	15%+
Margin	Leverage on a premium market share. Non-recurrence of bad debts, natural leverage and SDIs move towards normal opex.	Lack of critical size in the very fragmented US market, and dilutive impact of SecureNet (loss-making acquisition at end-2014).	Benefit of scale in a fast-growing market (natural operating leverage) and Worldpay's expertise in end-to-end solutions.
How?	By selling more products.	Thanks to integrated propositions.	By winning market share.
Base plan	• Continue trajectory. • Seamless customer experience. • Simple pricing. • Clear product suite driving cross-sales (esp. eCommerce). • New products and services: Business Dashboard.	• Extend SecureNet functionality into core proposition (POS 2.0, value added services, vertical solutions). • Grow partner network. • Continue growth in mid-market via verticalisation.	• Continue trajectory. • Capitalise on emerging markets exposure. • Support existing customers in new markets (incl. US). • Increase product penetration (esp. integrated payments). • Drive analytics and optimisation capability.
Potential actions	• Scale business dashboard and online products. • Integrate business hub. • Enhanced data and insights. • Extend range of value added services. • Business solutions partnerships.	• Accelerate delivery of new propositions and partners. • Upgrade technology to address large corporate market (leverage Global eCom product suite, extend acquiring engine capabilities).	• Launch CNP in North America. • China/SE Asia cross border CNP. • Target new verticals. • Accelerated product development.

Sources: Bryan, Garnier & Co est.

Fig. 44: Worldpay should grow at the same pace as its market over 2015/19

CAGR	2015-19e
Debit card	7%
Credit card	8%
Other Card	4%
=Total non-cash transaction (in value)	**7.3%**
vs. Worldpay's organic growth (BG ests.)	***7.6%***

Sources: Euromonitor International (data for UK, US, Canada, Japan, Brazil, France, Germany, Netherlands, Italy and Spain i.e. 75% of global transactions reported; Other card includes charge card, pre-paid and store card transactions); Bryan, Garnier & Co ests.

In terms of EBITDA margin, after an estimated decline of 30bp in 2015e, we are targeting growth of 180bp to 9.4% in 2016e and 150bp to 10.9% in 2017e, with still very different margins in each of the three divisions (very low in the US, average in the UK and strong in e-commerce). We are forecasting D&A of GBP145m in 2015e (of which around half owing to platforms), gradually moving in line with capex as of 2017e. **This results in underlying EBIT margins of 8.8% and 9.1% respectively (after 8.4% in 2015e) but only 6.1% and 7.6% including non-recurring costs.**

Note that our figures include the recovery by Worldpay of 80% of volumes from the largest GlobalCollect client (belonging to Ingenico) just before its flotation (i.e. during Q3 2015). On our information, the client was dual sourcing from Ingenico and Worldpay and Worldpay managed to recover 80% of volumes processed by Ingenico by reducing its prices (corresponding to an e-commerce contract of EUR50m on a 12-month basis namely around GBP38m, with a low margin).

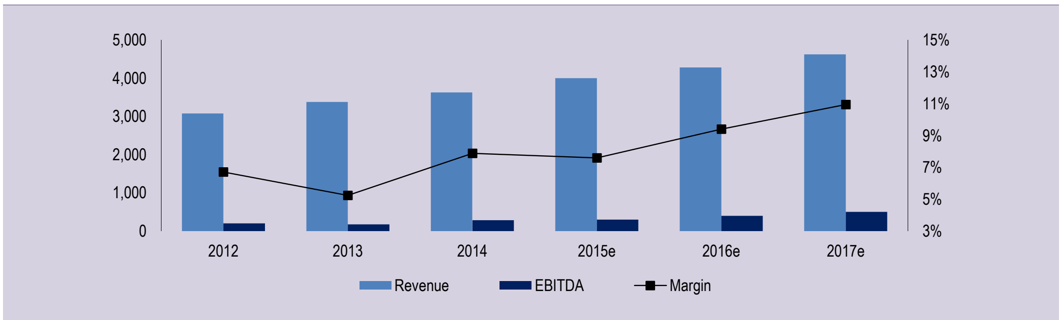
Fig. 45: Worldpay operating leverage over the next five years

	Next five years
Strong margin profile	• Meaningful expansion potential given scalable technology.
Operating leverage drives earnings growth	• Investment in cost base targeted to be slower than revenue growth leading to operating leverage.
Capital efficient mode drives FCF conversion	• More modest capital expenditure requirements anticipated after completion of platform project. • Target premium margins and capital efficiency to drive significant FCF. • Reduce leverage to 3.6x net debt/underlying EBITDA. • Expecting dividends of 20-30% of profit after tax.

Sources: Company; Bryan, Garnier & Co.

In the meantime, note that **Worldpay's accounts are subject to exchange rate fluctuations, especially for revenues received by the UK and European subsidiaries** (the entire European segment is managed by the UK). Operating results, assets and liabilities at these subsidiaries all need to be converted into GBP at each account closing. As such, wide changes in exchange rates between the GBP and other currencies to which Worldpay is exposed (euros and US dollars) could affect consolidated results in certain divisions and the value of its assets and liabilities in the consolidated balance sheet. It is nevertheless difficult to measure the impact, especially since the recently-listed company lacks detailed historical data in this area.

Fig. 46: Change in sales (GBPm) and EBITDA margin (%) from 2012 to 2017e



Sources: Company; Bryan, Garnier & Co ests.

After net financial expenses of GBP166m and a tax bill of GBP7m, **we are forecasting a fourth consecutive net loss in 2015e (-GBP14.9m).** Thereafter, with sales growth that should remain at around 7% in organic terms, operating leverage should start to materialise, primarily as of 2016 via the gradual end to the investment plan for the technological platforms (end likely in early 2017e). **Indeed, we are forecasting a positive attributable net profit as of 2016e (GBP149.5m in 2016e and GBP222.6m in 2017e**).

Fig. 47: Main financial items from 2014 to 2017e

GBPm	2014	2015e	Cons. 2015	2016e	Cons. 2016	2017e	Cons. 2017
Revenue	**3,626.6**	**4,000.0**	**4,005.9**	**4,280.0**	**4.253.7**	**4,622.4**	**4,590.3**
Y/Y change	*7.3%*	*10.3%*	*10.5%*	*7.0%*	*6.2%*	*8.0%*	*7.9%*
Y/Y change (lfl)	*9.2%*	*7.0%*	*N/A*	*7.0%*	*N/A*	*8.0%*	*N/A*
Net revenue	**863.4**	**974.3**	**972.4**	**1,072.1**	**1,068.7**	**1,179.7**	**1,175.3**
Y/Y change	*7.9%*	*12.8%*	*12.6%*	*10.0%*	*9.9%*	*10.0%*	*10.0%*
EBITDA	**286.1**	**304.0**	**309.5**	**402.3**	**396.1**	**505.7**	**500.7**
Margin	*7.9%*	*7.6%*	*7.7%*	*9.4%*	*9.3%*	*10.9%*	*10.9%*
Underlying EBITDA	**374.7**	**404.0**	**407.0**	**462.3**	**452.9**	**510.7**	**504.2**
Margin	*10.3%*	*10.1%*	*10.2%*	*10.8%*	*10.6%*	*11.0%*	*11.0%*
EBIT	**125.0**	**159.0**	**164.9**	**261.1**	**252.3**	**353.2**	**334.8**
Margin	*3.4%*	*4.0%*	*4.1%*	*6.1%*	*5.9%*	*7.6%*	*7.3%*
Underlying EBIT	**296.3**	**335.0**	**334.8**	**376.6**	**360.5**	**422.5**	**388.7**
Margin	*8.2%*	*8.4%*	*8.4%*	*8.8%*	*8.5%*	*9.1%*	*8.5%*
Attrib. Net profit	**-50.0**	**-14.9**	**-2.1**	**149.5**	**138.5**	**222.6**	**205.9**
Margin	*-1.4%*	*-0.4%*	*-0.1%*	*3.5%*	*3.3%*	*4.8%*	*4.5%*
Rest. Attrib. net profit	**91.7**	**126.1**	**140.6**	**233.8**	**220.7**	**273.9**	**250.1**
Margin	*2.5%*	*3.2%*	*3.5%*	*5.5%*	*5.2%*	*5.9%*	*5.4%*
EPS (p)	**-3.1**	**-0.9**	**-0.12**	**7.5**	**6.9**	**11.1**	**N/A**
Fully diluted rest. EPS (p)	**5.7**	**6.3**	**7.0**	**11.7**	**11.0**	**13.7**	**12.3**
FCF	**0.7**	**-1.3**	***-2.1***	**116.5**	***106.2***	**228.6**	***N/A***
FCF/underlying EBIT	*0.2%*	*-0.4%*	*-0.6%*	*30.9%*	*29.5%*	*54.1%*	*N/A*
Net debt	**2,254.1**	**1,384.3**	**1,392.8**	**1,232.1**	**1,283.7**	**1,044.7**	***1,083.6***
Gearing	*-1,173.4%*	*200.5%*	*N/A*	*146.7%*	*N/A*	*101.9%*	*N/A*

Sources: Bryan, Garnier & Co ests; company consensus (from 10 analysts – 30/11/2015).

Like plenty of technology companies, some of Worldpay's R&D costs are capitalised in its balance sheet (development of new software platforms, specific software for clients and IT platforms) **and then amortised when the project enters production.** This is common practice in the sector since it is also noted at the group's peers. **The amortisation timeframe is three/eight years at Worldpay, does not exceed five/seven years at Worldline (three/five years in practice** namely the average duration of contracts), three/five years at Ingenico Group, and 10 years at

Wirecard. **All these factors tend to inflate profitability somewhat, but in return weigh on FCF generation** (positive difference between capex and D&A), especially at Wirecard whose duration is longer.

We are forecasting capex of 4.1% of Worldpay's sales in 2015/16e (it has a further GBP100m to invest in its platforms over this period, namely 20% of the total cost of the plan), with the level sett o drop significantly in 2017e to 2.7%. As such, we are forecasting **2015 free cash flow generation slightly in the red, albeit with net growth over 2016e and 2017e. As such, the transformation of underlying EBIT into free cash flow is set to stand at virtually zero in 2015e, before rising to 31% in 2016e and 54% in 2017e, i.e. one of the worst rates in the sector à** (vs Ingenico at 70%e, Worldline at 66%e and Wirecard at 39% in 2015e). Concerning the dividend, we expect a first payment in 2017e (on 2016e results), bearing in mind that the payout ratio should stand at 20-30% (BG: 25%). **Worldpay is among the potential consolidators, but only over the medium/long terms** (for targeting a region or a technology) since its balance sheet is strained (**net debt forecast at GBP1.384bn at end-2015, pointing to gearing of 200%**). Finally, we estimate its **net debt/EBITDA ratio should stand at between 2x and 3x over the medium term** (BG: 4.6x in 2015e, 3.1x in 2016e and 2.1x in 2017).

Fig. 48: FCF and net financial position from 2014 to 2017e

GBPm	2014e	2015e	2016e	2017e
Underlying EBIT	**296.3**	**335.0**	**376.6**	**422.5**
Margin	*8.2%*	*8.4%*	*8.8%*	*9.1%*
Attrib. net profit	**-50.0**	**-14.9**	**149.5**	**222.6**
Margin	*-1.4%*	*-0.4%*	*3.5%*	*4.8%*
FCF	**0.7**	**-1.3**	**116.5**	**228.6**
Dividend per share (p)	0.00	0.00	1.87	2.78
Net debt	**2,254.1**	**1,384.3**	**1,232.1**	**1,044.7**
Gearing	*-1,173.4%*	*200.5%*	*146.7%*	*101.9%*

Source: Bryan, Garnier & Co ests.

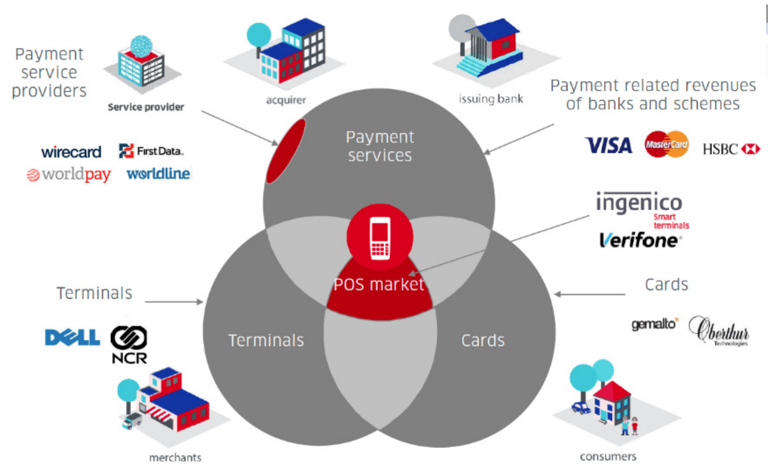
Worldpay is due to report full-year 2015 earnings on 8th March before trading. We expect the group to report a net loss over the year and expect it to provide no detailed annual guidance (simply reiterating its medium-term targets).

5. Payments: a buoyant market

We estimate that the **payments market is worth EUR533.5bn throughout the world, with revenues stemming from a number of sub-segments:**

- **Terminals** (electronic payment terminals, cash registers, cash-point machines etc.) >EUR200bne (including EUR2.5-3bne for EPT).
- **Payment services** >EUR8.5bne.
- **Banks and payment schemes** >EUR310bne.
- **Payment cards** >EUR15bne.

Fig. 49: The electronic payments galaxy and its players by core business



Source: Bryan, Garnier & Co.

5.1. EPTs: a duopolistic market

In recent decades, the payments system has started a fundamental trend with the gradual disappearance of cash and checks in favour of electronic payments. **The electronic payment terminals market benefits from attractive structural momentum:** it is a growing market (equipment and renewal), in a duopolistic situation (Ingenico Group no. 1 and VeriFone no. 2, 84% of market in value terms and 48% in deliveries combined in 2014), with high entry barriers (PCI certifications, local payment applications and connections with acquirers).

Fig. 50: Global payment terminal deliveries in 2014

Ranking 2014	Ranking 2013	Company	Country	Units	Y/Y change	Market share
1	**1**	**Ingenico Group**	**France**	**9,120,000**	**36%**	**30%**
2	**2**	**VeriFone**	**US**	**5,504,510**	**17%**	**18%**
3	3	PAX Tech.	China	3,024,576	47%	10%
4	5	Fujian Newland	China	2,325,800	141%	8%
5	4	SZZT Electronics	China	1,721,350	2%	6%
6	8	Shenzhen Xinguodu	South Korea	1,074,518	38%	4%
7	10	New POS Technology	South Korea	979,889	113%	3%
8	7	Bitel	China	877,828	4%	3%
9	6	Cybernet	Taiwan	814,900	-6%	3%
10	9	Castles Tech.	China	743,800	8%	3%
TOP 10				**26,187,171**		**87%**

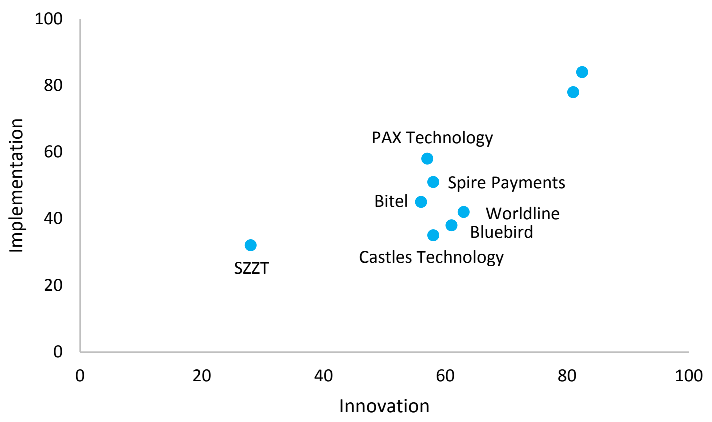
Sources: Nilson report; Bryan Garnier & Co.

Fig. 51: Payment terminal deliveries in Europe in 2014

Ranking 2014	Ranking 2013	Company	Units	Y/Y change	Market share
1	**1**	**Ingenico Group**	**2,600,000**	**13%**	**52%**
2	**2**	**VeriFone**	**1,316,900**	**-2%**	**26%**
3	3	Spire Payments	342,000	20%	7%
4	6	Yarus	117,000	24%	2%
5	4	Worldline	106,394	-11%	2%
6	5	Cybernet	100,300	-15%	2%
7	7	PAX Tech.	95,010	17%	2%
8	15	Fujian Newland	90,000	800%	2%
9	8	Castles Tech.	37,000	-5%	1%
10	9	CCV	28,000	4%	1%
TOP 10			**4,832,604**		**97%**

Sources: Nilson report; Bryan Garnier & Co.

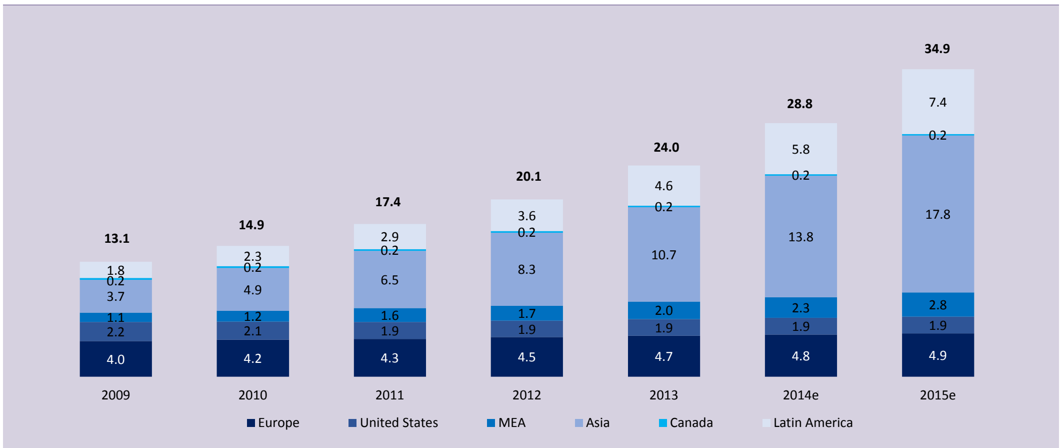
Fig. 52: The payment terminals market



Sources: ABI Research, Bryan Garnier & Co.

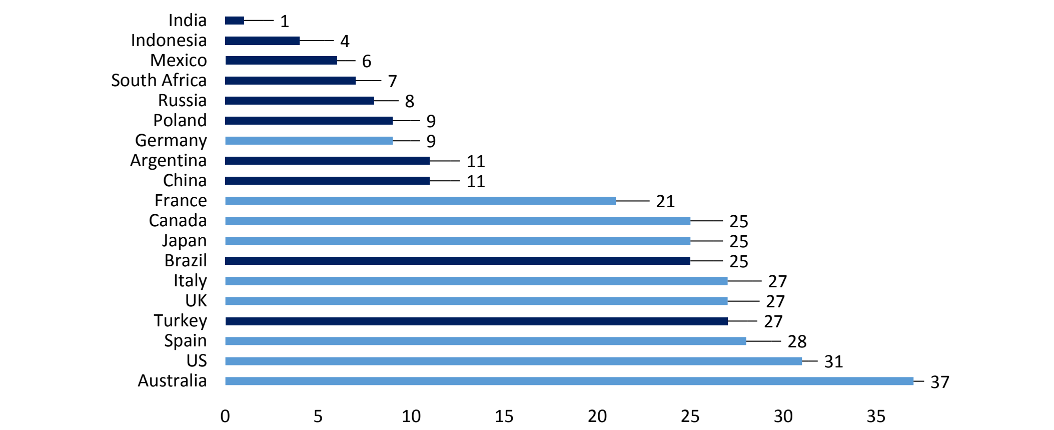
Historically, the market growth rate is 5-10% a year. According to BI Intelligence, thanks to Ingenico and VeriFone, the market posted double-digit volume growth from 2009 to 2013 (CAGR of +16.4%), which should accelerate between 2013 and 2015e (CAGR of 20.6%). In terms of momentum, growth is stronger in emerging markets (Asia +30% and +29%, Latin America +26% and +27%, Africa and Middle East +17% over both periods), modest in Europe (+4% and +3%) and improving in the US (-4% and +1%) and in Canada (-5% and -3%). **In value terms, we estimate the market at EUR2.5-3bn.** For a player such as Ingenico Group, innovation is what enables it to maintain stable prices (EUR150 on average, from EUR100 for the entry level to slightly above EUR400 for the more developed). It only has one operating system, based on a free source code, with the possibility of collecting customer data via surveys on the EPT, thereby enabling it to generate economies of scale and improve the speed of transactions. **EPTs are renewed every four/five years on average in the market.** Finally, note that among the players, a number only sell EPTs (e.g. Ingenico) whereas others combine both sales and rental (e.g. VeriFone, Worldline). Meanwhile, Worldpay has an EPT business (in Worldpay UK), although this is not significant (<2% of sales and <8% of net 2014 sales) and primarily concerns leasing (very low proportion of sales), i.e. the group purchases terminals from Ingenico and VeriFone and rents them to merchants.

Fig. 53: EPT delivery forecasts in the world (m units)



Sources: BI Intelligence; Bryan Garnier & Co.

Fig. 54: Installed base of payments terminals per 1,000 inhabitants, by country



Dark blue: indicates first equipment markets and/or government incentives.

Sources: Ingenico Group; Bryan, Garnier & Co.

Over the past 10 years, the electronic payment terminals market has industrialised and clearly structured itself via significant M&A activity. Among the most important we would note the acquisition of Lipman by VeriFone (April 2006), the merger between Ingenico and Sagem Monetel (March 2008), the takeover of Thales' e-transactions businesses by Hypercom (April 2008), that of Gemalto's EPT activities by VeriFone (December 2010) and finally, the acquisition of Hypercom's businesses by VeriFone excluding the US, Spain and UK (August 2011).

Since the acquisition of Hypercom by VeriFone and then the sale of its US businesses to a fund, the market has become a duopoly. Merchants generally opt for a strategy of dual sourcing in order to avoid being too captive and/or subject to supply risks, and therefore naturally turned to Ingenico. **Meanwhile consolidation of the US market was beneficial against a backdrop of migration to EMV, in which it is a reference.** In all, Ingenico Group (around 44% of market share in revenue terms and 30% in deliveries during 2014) and VeriFone (around 40% of revenues and 18% of deliveries in 2014) have dominant positions that are continuing to grow. **In recent years, the French group has clearly gained the upper hand relative to its US rival** (e.g.: in terms of deliveries in 2014, Ingenico Group grew by 36% over one year vs. +17% for VeriFone). In addition to certification problems, the main issue at VeriFone stems from the fact that it has made a large number of acquisitions but has not merged the various platforms (at present it still has eight operating systems and is unlikely to have finished merging them before early 2016), thereby slowing its ability to innovate. Meanwhile, **Ingenico Group only has one single operating system for all of its Telium EPTs** (except for China, which works independently since the acquisition of Landi in 2008) **thereby enabling it 1/ to be more innovative** (the Telium Tetra range enables merchants to download business applications directly on its terminal), **2/ improve the speed of transactions, and 3/ generate economies of scale** (since all the components bought are similar).

After these leading two groups come local players such as PAX in China, which is currently the no. 3 player in the sector but is far behind the first two (10% market share vs 30% and 18%). We estimate that if second tier groups would like to come off well (be competitive or reduce the gap with the leading groups), they will have to specialise in market niches and undertake a selection in terms of R&D and acquisitions (to be seen as niche specialists). They cannot simply settle for imitating the success of market leaders.

Fig. 55: 2014 market share in EPT deliveries, by company and region

	Asia Pacific		Europe		Latin America		MEA		United States		Canada	
Rank	**Group**	**MS**	**Group**	**MS**	**Group**	**MS**	**Group**	**MS**	**Group**	**MS**	**Group**	**MS**
1	Ingenico	25%	Ingenico	52%	Ingenico	36%	Bitel	24%	VeriFone	49%	Ingenico	69%
2	Fujian Newland	14%	VeriFone	26%	VeriFone	32%	VeriFone	16%	Ingenico	27%	VeriFone	24%
3	PAX Tech.	13%	Spire Payments	7%	PAX Tech.	9%	PAX Tech.	15%	Equinox Pymts	8%	SZZT Elect.	2%
4	SZZT Elect.	10%	Yerus	2%	Castles Tech.	6%	Castles Tech.	11%	First Data	5%	PAX Tech.	2%
5	VeriFone	8%	Worldline	2%	Cybernet	4%	Ingenico	8%	PAX Tech.	3%	Castles Tech.	1%
6	Shenzhen Justtide	7%	Cybernet	2%	Yarus	4%	Cybernet	6%	USA Tech.	3%	Yarus	1%
7	New POS Tech	6%	PAX Tech.	2%	Spectra Tech.	3%	Shenzhen Justtide	3%	UIC	2%	Shenzhen Kaifa	0%
8	Hangzhou Sunyard	4%	Fujian Newland	2%	Bitel	2%	SZZT Elect.	3%	Castles Tech.	1%	Hangzhou Sunyard	0%
9	Cybernet	2%	Castles Tech.	1%	SZZT Elect.	1%	Spire Payments	3%	Yarus	1%	Fujian Newland	0%
10	Vanstone Electronic	2%	CCV	1%	Shenzhen Justtide	1%	Spectra Tech.	2%	SZZT Elect.	0%	USA Tech.	0%

Sources: Nilson Report, Bryan Garnier & Co.

In coming years, growth in the ETP market should remain driven by:

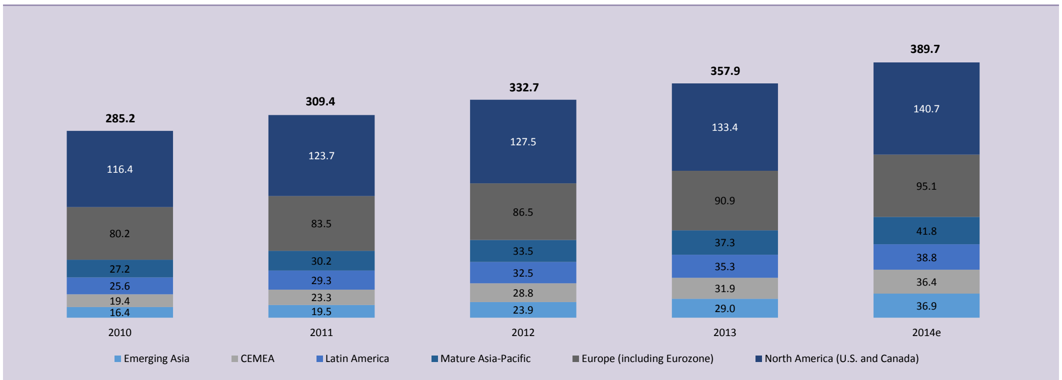
- **Regulations pushing towards secure transactions.** The market is also benefiting from regulatory changes in Europe, with the roll out of the European Directive on Payment Services (DPS) and the Single Euro Payments Area (SEPA), which authorises cross border electronic transactions, thereby helping to facilitate consume payments outside their original country (a cross border payment in euros should be handled just as quickly, safely and on the same terms as a domestic payment). Developed countries need to face increasingly strict security standards. The two major security standards are EMV (Europay Mastercard Visa) and PCI. EMV requires a chip card (chip-and-pin or chip-and-sign) instead of a magnetic swipe card. Moves towards the EMV standard have been a major source of demand for replacements in Europe (the UK is the most recent market to switch over in Europe and the adoption of the chip and pin payment system has enabled it to reduce in-store fraud by 70%).
- **The further deployment of EMV EPTs in the US.** Equipping merchants in EMV EPTs started in H2 2014 (MasterCard and Visa set an ultimatum on 1st October 2015, as of which date, unequipped merchants carried the financial responsibility of fraud). At end-2015, around half the network had migrated (90% of large retailers and 35% of small merchants). Since a deployment of this type generally takes four years, players such as Ingenico and VeriFone should witness growth out to 2017e. Since fraud is set to decline at major retailers, it is likely to switch onto small/mid-sized retailers, which should then equip themselves as of 201 and 2017, not to mention the fact that cash registers (around 30% of merchants have these in the US) should also be replaced by EPTs.
- **The constant penetration of payment terminals in emerging markets.** We think of China in particular (its network should triple over three years to 22m EPTs), Japan (it could switch to EMV in the run-up to the 2020 Olympic Games) as well as India and Indonesia (which have only one and four EPTs per 1,000 inhabitants respectively, vs. 24 on average in developed countries). Since these markets are becoming industrialised and are continuing to grow, a higher share of the population is set to use the traditional banking system. The growing middle classes (50% of the global population in 2030 vs. 30% at present according to Ernst & Young) combined with the government's backing to increase tax collection, are all catalysts for moving away from cash payments and into electronic payments (payment cards, payment terminals, transaction services etc.). Note that the German market compares more to an emerging market than a mature market since it still uses very few payment cards since the population generally prefers to pay in cash).
- **Shortening the payment terminal cycle from six/seven years to four/five years on average.** New functionalities are gradually added to the hardware and prompt a shorter lifespan for the equipment in mature countries. The terminal replacement cycle is fairly different depending on the country. For example, it ranges from three years in Brazil (country driven by innovation and which regularly changes its EPTs) to seven years in the US (low level of security at present, but this is set to change thanks to migration to EMV)).
- **Development of value-added services and application to other vertical markets.** Publishers are adding an increasing amount of functionalities to their payments terminals, which look more like mobile telephones with increasingly large screens and greater mobility etc. They also feature applications in order to offer higher value-added (stock management, customer management), and help adapt their use to business specifics and issues.
- **The increasing penetration of wireless communications (wireless EPTs), contactless payment (NFC) and growth in the installed base of mobile equipment that can be transformed into an EPT (m-POS)** should continue to drive growth in electronic payments systems (education and habits of population in this respect). Note that alternative terminals (tablets, smartphones etc.) should not eat into the traditional market. They are likely to take a small market share but should generally add to classic EPTs (e.g. terminals in stores and delivery staff equipped with m-POS).

5.2. Payment services: a fragmented market

According to MasterCard, 85% of retail sales transaction volumes (in-store or online) are carried out in cash or by check, representing 60% in value terms. Governments are clearly pushing for the adoption of electronic payment in order to facilitate traceability and tax collection. Finally, electronic payment is far cheaper than traditional cash payments (handling of cash at the sales point, payment service of banking services provider, management of checks and other general costs etc.). The ratio between the two is 1 to 10. As such, card payments (whether the card is present or not) still harbour significant potential.

Recent figures by Capgemini Financial Services show that **390bn transactions were carried out in the world in 2014 and settled in other ways than cash.** This type of settlement therefore posted growth of 8.9% over one year, driven by emerging markets. Annual growth in non-cash payments reached 16.2% (vs. 5.5% in mature countries). In market share terms, the largest regions are North America, followed by Europe and Asia. Transactions by credit card and debit card still account for the lion's share (55%) and continued to increase.

Fig. 56: No. of non-cash transactions (bn) by region, 2010-2014e



Sources: Capgemini Financial Services Analysis; ECB Statistical Data Warehouse; Bank for International Settlements Red Book, Country's Central Bank Annual Reports; Bryan, Garnier & Co.

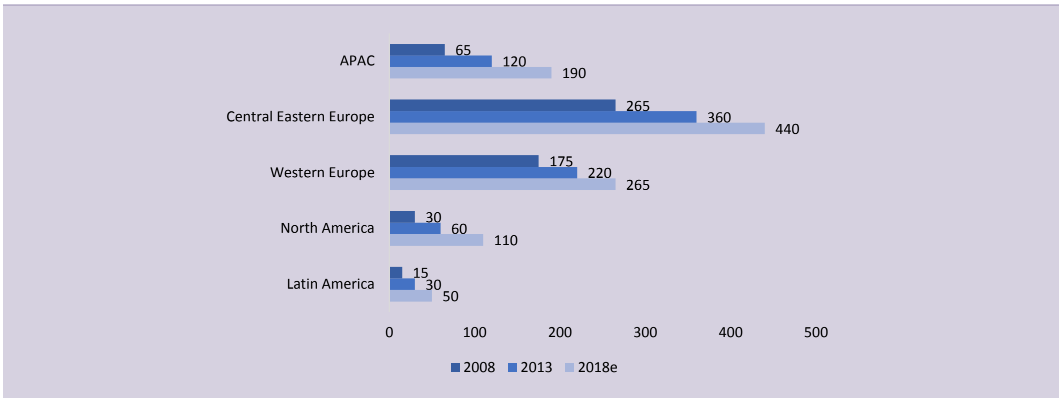
Fig. 57: CAGR of no. of non-cash transactions by region, 2010-14 and 2013-14

Non cash transaction	2010-14 CAGR	2013-14 CAGR
Emerging Asia	22.5%	27.2%
CEMEA	17.0%	14.1%
Latin America	11.0%	9.9%
Developing countries	***16.2%***	***16.5%***
Mature Asia-Pacific	11.3%	12.1%
Europe (including Eurozone)	4.4%	4.6%
North America (US and Canada)	4.9%	5.5%
Mature countries	***5.5%***	***6.1%***
Global	**8.1%**	**8.9%**

Sources: Capgemini Financial Services Analysis; ECB Statistical Data Warehouse; Bank for International Settlements Red Book, Country's Central Bank Annual Reports; Bryan, Garnier & Co.

We believe that electronic payments should increase massively, both for merchants (who would like a simple and secure solution that does not compromise customer data and is less costly than managing cash) **and for consumers** (who would like to be able to pay in a flexible way, when and where they like). In the world, in terms of the number of non-cash transaction volumes, the largest regions are North America, followed by Europe and Asia. In contrast, **in terms of the number of transactions per capita, Europe comes out ahead of Asia and North America.**

Fig. 58: Number of electronic transactions per capita



Sources: McKinsey Global Payments Map; Bryan, Garnier & Co.

The structural, regulatory and technological context is clearly beneficial to securing electronic payments, and this favours the outsourcing of payment processing (for both merchants and banks) to specialised services providers.

Payment services are a fragmented market, in both the physical world and on the internet. With high growth in mobile payment and online trade, a lot of players have positioned themselves in different parts of the transaction process. We estimate the number of PSPs at around 50 (certain banks, Worldpay, Wirecard, Worldline, Ingenico, First Data, Global Payments…). As for payment terminals, merchants generally opt for a dual sourcing strategy (to avoid being too captive and/or subject to the risk of a non-supply of services).

Fig. 59: Worldpay competitive landscape

	Global payment partners	Niche specialists	Regional champions	Domestic bank heritage
Challenge	Building global reach and market share	Identifying and sustaining their niches	Consolidating and growing established market position	Creating differentiated products and services

Sources: Company; Bryan, Garnier & Co.

Fig. 60: Positioning of various PSPs in Europe

	Issuing transaction processing	Services to cardholders and issuers	Automated clearing house	Credit/debit transfers	Services to merchants	Acquiring transaction processing	Commercial acquiring	Acceptance POS / ecommerce	Services to new digital businesses
Worldpay					●	●	●	●	
First Data	●	●			●	●	●	●	
Global Payments	○				●	○	●	●	
Ingenico Group					●	●	●	●	
NETS	●	●	●	●	●	●	●	○	○
Six Payment Serv.	●	●	●	○	●	○	●	○	
TSYS	●	●				○			
Wirecard	○	○			●	●	●	●	
Worldline + Equens	●	●	●	●	●	●	●	●	●

● *Core offering* ○ *Non-core offering*

Source: Bryan, Garnier & Co.

The latest Nilson report states that 38 acquirers managed more than one billion card transactions with their merchants throughout the world in 2014 (vs. 37 in the previous year). The top four in this ranking processed more than 10bn transactions by card each, whereas Worldpay ranks in fifth place just below the 10bn market (9.7bn with market share of 5%). In Europe, Worldpay is by far the no. 1 player (market share of 20%e) thanks to its status of uncontested leader in the UK market (market share of 42%, ahead of Barclays at 38%e, Global Payments and Lloyds TSB). Finally, in the US, it ranks no. 9 (market share of 3%) in a more competitive market.

Fig. 61: Top 10 acquirers in the world, Europe and the US

Top 10 worldwide (Market share est.)	Top 10 in Europe (Market share est.)	Top 10 in the US (Market share est.)
1- Vantiv (9%)	**1- Worldpay (20%)**	1- Chase Commerce Solutions (17%)
2- Bank of America (8%)	2- Barclays (12%)	2- Bank of America (16%)
3- Chase Commerce Solutions (7%)	3- Sberbank (12%)	3- Vantiv (15%)
4- First Data (6%)	4- Credit Mutuel CIC (9%)	4- First Data (13%)
5- Worldpay (5%)	5- Credit Agricole (7%)	5- Elavon (7%)
6- Citi Merchant Services (4%)	6- Swedbank (6%)	6- Wells Fargo Merchant Services (5%)
7- Cielo (3%)	7- Elavon (5%)	7- Citi Merchant Services (4%)
8- Elavon (3%)	8- BPCE (4%)	8- Global Payments (3%)
9- Global Payments (3%)	9- Worldline (4%)	**9- Worldpay (3%)**
10- Rede (2%)	10- Global Payments (3%)	10- Heartland Payment Systems (3%)

Based on the number of transactions
Sources: Nilson Report 2015; Bryan, Garnier & Co.

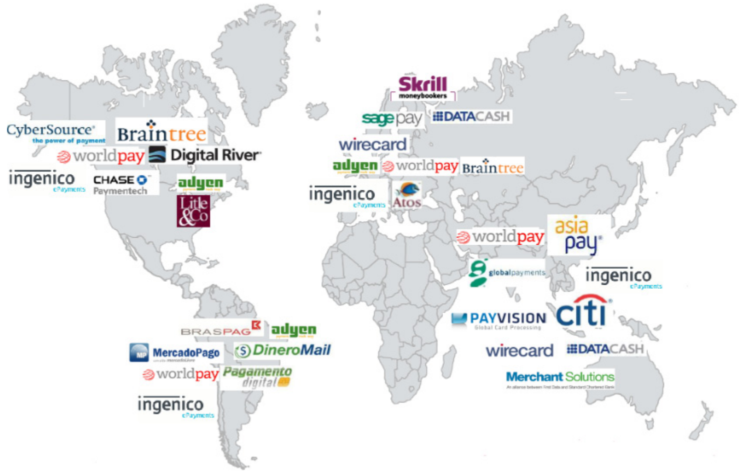
We consider that **Worldpay is well placed in e-commerce on a global level and in Europe. In all, only four players really stand out in e-commerce:** Worldpay, Wirecard, Adyen and Ingenico Group (via its acquisitions of GlobalCollect and Ogone). Below this top four, there are around 20 or so local players (who are leaders in a region).

Fig. 62: Market share of European e-commerce players in 2015e

In %	Global market share	Market share in Western Europe
Worldpay	**6%**	**20**
Wirecard	5%	18
Adyen	4%	15
Ingenico Group (Ogone + GlobalCollect)	3%	10
Top 4	**18**	**63**

Source: Bryan, Garnier & Co ests.

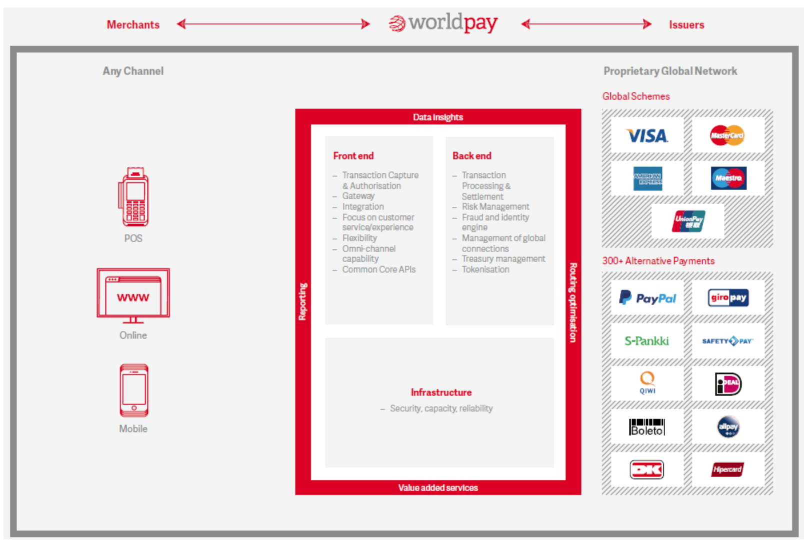
Fig. 63: The online payments market is very fragmented



Source: Bryan, Garnier & Co.

Clearly in the world today, **merchants must be able to provide their clients a secure purchase experience that is the most fluid possible, irrespective of the payment means and the sales channel** (physical, online and mobile). Interaction between the three channels is set to be a major challenge for merchants in coming years. **Only payment services providers (PSP) will be able to offer them a genuine secure multichannel or omnichannel solution.** Indeed, with the decline in interchange fees implemented by the EU on 9th December 2015 (0.3% for credit cards, and 0.2% for debit/pre-paid cards, bearing in mind that a lot of countries had already anticipated it) and issues concerning security against fraud (especially online fraud, which concerns half of all fraud today), **banks are currently abandoning this business and outsourcing it** (to players specialised in this field, namely PSPs), in order to refocus on their business.

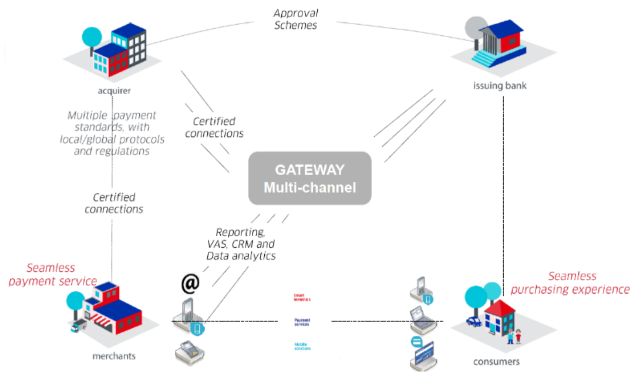
Fig. 64: Omnichannel integrated offer



Source: Company.

We expect further consolidation in the payments sector in Europe and the US, especially in the online segment (and especially e-commerce), somewhat similar to recent years in the hardware payments segment. For example, in 2007, there were around 20 manufacturers in the world in the payment terminals segment, whereas today, there is only really Ingenico and VeriFone left. The high growth witnessed in Southeast Asia in recent years in the online segment is set to come to Europe and the US in coming years (2016/17e). These merger trends are set to result from the market becoming increasingly global and more complex. We estimate that all **PSPs we cover (Ingenico, Wirecard, Worldline and Worldpay) should take part in this consolidation.**

Fig. 65: Heading for an acceptance of payments in all sales channels



Source: Bryan, Garnier & Co.

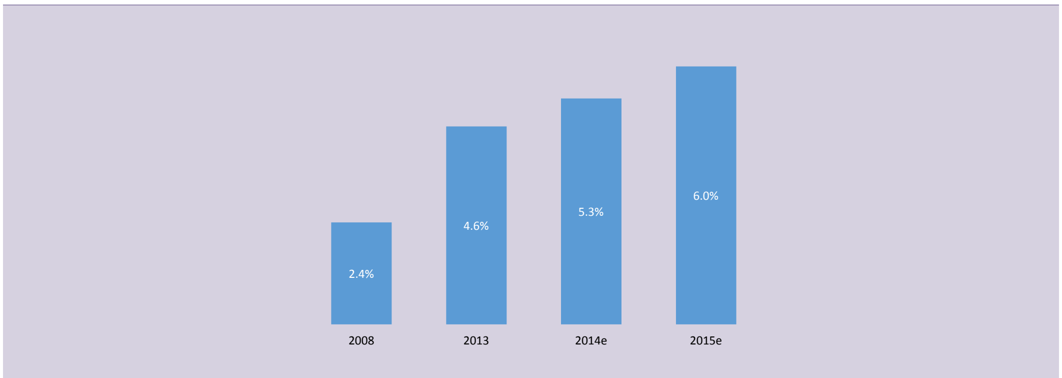
In coming years, growth in payment services should be driven by:

- **The in-store transaction management market.** This is often part of a much larger IT infrastructure that requires specific developments (each country has payment protocols and different applications).
- **Regulatory changes, and especially SEPA. Banners need to manage their payments on a European basis with harmonised transaction processing.** SEPA is set to increase demand for transaction services in Europe since banks will have to outsource an increasing amount of services (managing cross-border transactions). The idea is also to reduce the price of electronic transactions (via a cut in commission fees) in order for merchants to accept more card payments (increase in transaction volumes). The same trend is likely in the US, once the shift to EMV is complete.
- **Increasing penetration of: 1/ e-commerce** (transaction volumes with a 2011/15e CAGR of +16%). This demand is driven by retail banners, who see a potential increase in their activity, and consumers, for whom it should be more possible and easier to pay for things as and when they like. Electronic payment is increasing every year in the retail sales mix on a global scale (from 2.4% in 2008 to 4.6% in 2013 according to McKinsey figures, and probably 6% at present). **2/ m-commerce** (2011/15e CAGR of +61%). Over the past five years, sales of smartphones and tablets have increased as connection technology costs have dropped (wireless internet, high speed and GPS by satellite). More than 50% of Google searches are now made by mobile devices, thereby building a mobile internet and changing the way consumers pay for their purchases. Out of the two billion telephone owners in emerging markets (source: Nokia), only very few of these have a bank account. As such, mobile payments are very relevant. Note that while it is true that these channels are growing strongly, **the number of physical**

transactions made by card currently remain four times higher than the number of transactions by internet and 10x higher than those made by mobile.

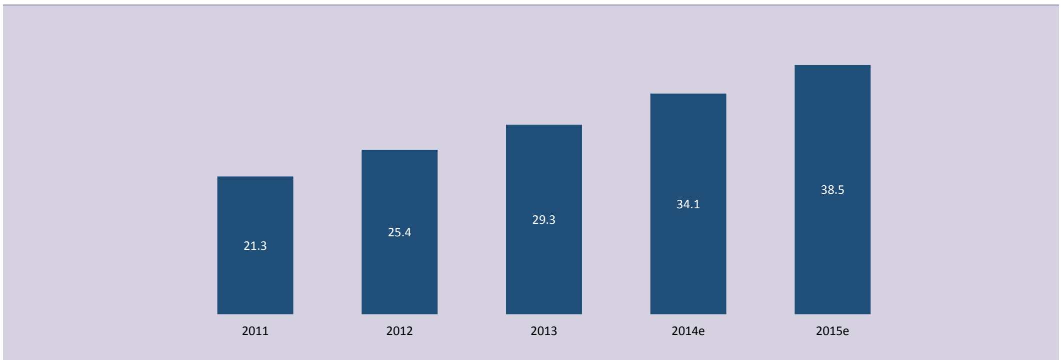
- **A multichannel solution for greater simplicity and efficiency.** The aim is to manage, secure and collect physical payments (accelerating checkout visits) and online and mobile payments (improve the transformation rate and increase sales throughout the world) in order to create new sales opportunities and enable merchants to benefit from a common reporting system. Management platforms for all these transactions (in-store, online and mobile) must be connected to as many acquirers and payment schemes as possible.
- **Spreading of contactless technology.** Indeed, the use of contactless cards and mobiles (more than 300 types of payment means are available throughout the world such as Paypal, Apple Pay, Android Pay…) should help spread the NFC technology which equips numerous terminals but is only very little activated: around 30% of the terminals network in France, for example). This is a means of storing the card in a digital format.
- **The need for more security, especially on internet.** Payments without the card being present (on internet and on mobile) are those that generate the most fraud (more than 60% in value terms throughout the world and 50% in Europe). The emergence of these payment means has shaken up the electronic payment market and helped increase the addressable market for micro-merchants, although a lot of these do not meet regulatory restrictions. As such, there is a genuine need for control and security solutions adapted to each region.
- **No macro-economic sensitivity.** During crisis periods, consumers tend to pay by card rather than in cash (in order to benefit from deferred debit, avoid bank overdrafts etc.). This reduces the average amount paid but significantly increases the volume of transactions.

Fig. 66: Share of e-commerce (in value terms) in the global retail market



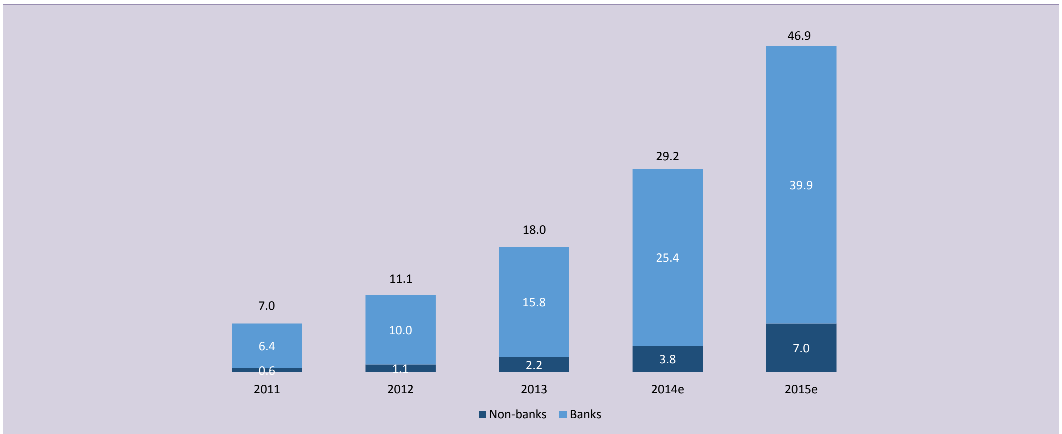
Sources: McKinsey Global Payments Map; Euromonitor; Bryan, Garnier & Co ests (2014e and 2015e).

Fig. 67: Number of e-commerce transactions (bn) in the world over 2011-15e



Sources: Capgemini Financial Services Analysis; Bryan, Garnier & Co.

Fig. 68: Number of mobile payments throughout the world (bn), over 2011-2015e

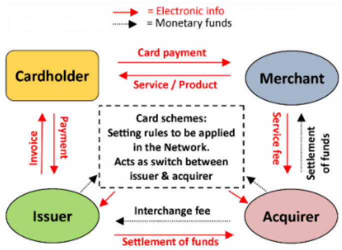


Sources: Capgemini Financial Services Analysis; Bryan, Garnier & Co.

5.3. Various players intervening during a transaction

Card payment (whether the card is present or not) involves a system containing four major players: 1/ the cardholder (consumer), **2/** the merchant (seller of goods/services), **3/** the card acquirer (acquiring bank or PSP) and **4/** the card issuer (the cardholder's bank). The cardholder users a debit, prepaid or credit card to purchase goods or a service from a merchant. The acquirer receives the payment information and transfers it to the relevant card network (the main two schemes being Visa and MasterCard), which passes on the information to the bank that issued the card. This bank approves the transaction (or not) and transfers the information to the network, which then passes on the information to the acquirer. The merchant therefore receives the payment less the merchant service fee that it must pay to its banks for its contribution to the system, and enabling the consumer pay less for their card. The acquirer retains a portion (one-third) and passes on the remainder of this fee to the issuing bank (half interchange fee and half the bilateral rate of blocked transactions).

Fig. 69: Card transaction scheme



Source: Bryan, Garnier & Co.

Fig. 70: Breakdown of merchant service fee

Merchant service fee breakdown		
Interchange fee	**Bilateral rate for blocked transaction**	**Fee charged by the acquiring bank**
(1/3)	(1/3)	(1/3)
Fee paid by the acquirer to the issuer		**Fee retained by the acquirer**
(2/3)		(1/3)

Source: Bryan, Garnier & Co ests.

This four-player scheme (traditional model for Visa and MasterCard) **is that known to Worldline, Wirecard and Ingenico Group in their role as payment services providers** (PSPs processing payment transactions and managing risk). However, there is also a three-player scheme, whereby the card network is also the acquirer and the issuer of cards (American Express model), which is clearly far less attractive for PSPs. **Thereafter, during the card transaction, a number of players are positioned throughout the chain.**

Fig. 71: Value chain of a physical transaction by card

Merchant	Merchant's bank/acquirer	Merchant processor	Payment network	Issuer processor	Bank/Issuer
Contracts with acquirer for payment services. Accept payment with POS terminals or online.	Sings up merchants for card acceptance. Establishes pricing agreement	Processes payment processing, authorizing, settlement and clearing services.	Connects processors and issuers. Routes transactions and establishes network fees	Processes for issuing bank. Authorization, settlement, clearing, reports, statements	Card issuing entity. May or may not outsource issuer processing.

Source: Bryan, Garnier & Co ests.

Fig. 72: Value chain of an online transaction by card (online gateway)

Merchant	Gateway	Acquirer/processor	Payment network	Bank/Issuer
Contracts with acquirer for payment services. Accept payment online.	Bundles and sends purchase request to processor	Processes information and sends to respective network.	Routes requests to respective card issuing banks.	Grants approval or rejection and sends response to payment networks.

Source: Bryan, Garnier & Co ests.

- **The issuer:** cardholder's bank, which shoulders the financial risk of the transaction.
- **The acquirer**: this is the unit that introduces the payment into the value chain and is therefore contractually responsible for underlying transactions such as payments authorisation, clearing and settlement. The merchant is tied to an acquirer (acquiring bank or PSP) enabling to accept card payments. If the acquirer is not a bank itself, card schemes require that it be affiliated to a bank. The acquirer helps the merchant choose the equipment for receiving payments (e.g. EPTs etc.) and decided what types of card to accept. They also provide client support and associated services like online offers and e-commerce solutions.
- **The processor**: a technical operator that provides the infrastructure to support the services handled by the acquirer. In practice, acquirers outsource the merchant's network management services to a processor. The processor supplies the technology that processes the payment transaction.
- **The payment services provider**: a company that handles all of the electronic payment services, and potentially settlement in accordance with the financial services directive in Europe, whereas in the US, a financial institution always settles the payment. Note that some PSPs are also acquirers.

Fig. 73: Presentation of players involved in a transaction and their role

Player	Role
Merchant	When a client make a purchase with its payment card, the merchant swipes the card and enters the purchase information into a point-of-sale (POS) terminal or pay online through a payment gateaway (e-commerce application). Point-of-sale terminals are provided by the merchant's acquiring financial institution (the "acquirer") and payment gateway by a payment service provider – also referred to as the payment processor.
Acquirer	The merchant's payment terminal is connected to the network of the acquirer which is connected to the payment network of the payment organization (such as MasterCard, Visa...). The details of the transactions are transmitted across the network in order to confirm the validity of the card and the availability of the funds to cover the purchase. The merchant will receive an authentication approval and in turn, will provide the goods or services the client is purchasing. In a separate process, the merchant's acquirer will obtain the amount of the purchase from the cardholder's payment card issuer and will transfer that amount to the merchant. To establish card acceptance in their business and to offset the cost of managing the payment system, merchants pay a merchant discount rate for each credit and debit card transaction.
Issuer	The organization (bank, retailer...) that provide a credit card is an issuer. It defines the features and terms of the client's card, and handles the billing of its transactions. When a client make a purchase with its credit card, the issuer is contacted by the acquirer, verifies the transaction information against its records and provides confirmation that the funds are available. It is up to the issuer to flag a problem, like insufficient funds or a refusal of the transaction if the card has been reported stolen. This entire process occurs in only a few seconds every time a client pay with a credit card.
Card association	MasterCard, Visa... operate a sophisticated and secure global network that handles more than billions transactions annually. Their network connects acquirers with their merchant customers and cardholders with their card issuers.
Processor	A technical operator providing infrastructure to support acquirer functions, such as authorization, clearing and settlement services. In practice, acquirers outsourced merchant acquiring services to processor.
Payment service provider	A PSP offers shops online services for accepting e-payments by a variety of payment methods including credit card, bank-based payments such as direct debit, bank transfer, and real-time bank transfer based on online banking. It uses a software as a service model and form a single payment gateway for their clients (merchants) to multiple payment methods. A PSP can connect to multiple acquiring banks, card, and payment networks. In many cases, the PSP will fully manage these technical connections, relationships with the external network and bank accounts. A full-service PSP can offer risk management services for card and bank based payments, transaction payment matching, reporting, fund remittance and fraud protection in addition to multi-currency functionality and services. Some PSPs provide services to process other next-gen methods (payment systems) including cash payments, wallets, prepaid cards, vouchers, and even paper or e-check processing. Some PSPs could be acquirers.

Sources: MasterCard; Bryan, Garnier & Co.

5.4. And how they are paid

A transaction commission fee remunerates the various intermediaries. The merchant fee includes three fees: that of the acquirer/processor, that of the card network and the interchange fee that is paid to the consumer's bank. **Different parties shoulder the financial risk: 1/ for consumers, the risk is borne by their bank,** partly via the interchange fee, which is the highest of all (banks shoulder the highest costs associated with the issue of payment means and transaction authorisation: insurance, reimbursements for fraud/non-payments, card issuer etc.), **2/ for merchants, the risk is shouldered by the acquirer (acquiring bank or PSP) in the case that they cannot supply the goods and reimburse consumers** (example: in the event of bankruptcy, they must substitute themselves). Note that **internet payments tend to have the highest interchange fees** (given the higher fraud rate online, representing 60% of global fraud value in the world and 50% in Europe). **Finally, the structure of interchange commissions is also different between card types: they are generally higher for credit cards than for debit/prepaid cards,** given the risk associated with credit.

During an internet card payment (card not present), the issuing bank can rebill fraudulent transactions to the merchant and the acquirer (or the PSP when this concerns a payment gateway). Note that the **barrier between processor and acquirer is quite difficult to discern since the acquirer and the processor are increasingly often the same company. However, the acquirer is generally the one that has the pricing power** (it carries the risk of fraud on the merchant's side, which explains why it is paid a percentage of the transaction value), whereas the **processing side is considered more as a commodity supplied on a wide scale** (which is why the processor is paid a fixed amount per transaction).

Fig. 74: Overview of various commission types

	Acquirer/Processor fee	Interchange fee	Card network fee
Who collects the fee?	Merchant acquirer and/or merchant processor	Card issuing bank	Card networks for access and processing over network
What proportion?	It depends if the transaction is in-store or online. - The acquirer tends to have the most leverage when it comes to pricing as it owns the client contract - The processing is more a commoditised service provided at scale.	The lion's share	The smallest
Is it negotiable?	Yes	No	No

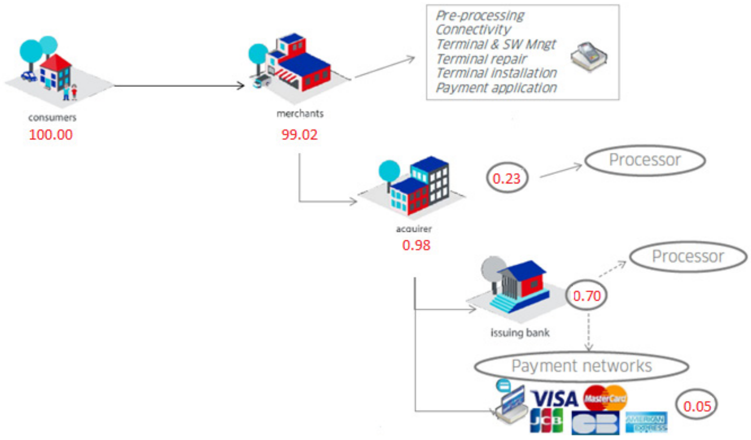
Source: Bryan, Garnier & Co.

If we take the example of Worldpay for a bank card transaction of GBP100: the merchant retains GBP99.02 and pays a fee of GBP0.98 to their bank/acquirer (this is booked under Worldpay's sales: gross sales). **This merchant commission fee is divided between:**

- The acquirer/processor, which is paid GBP0.23 (in our example, this is Worldpay's own commission fee, namely close to a gross margin before other cost of sales).

- The remaining GBP0.75 (which is booked as the cost of sales by the acquirer), **is itself divided into GBP070 for the issuing bank** (the acquirer pays this bank the lion's share including the interchange fee, a portion may be passed onto a processor if it outsources processing) **and GBP0.05 for the card payment network** (this is the smallest share, but this is clearly compensated for by the volume of transactions).

Fig. 75: Remuneration of various players in a GBP100 transaction



Source: Bryan, Garnier & Co ests.

Note that at Worldpay, recognition of revenues in the commercial acquiring business is not different to the majority of players we cover. Indeed, the group books the merchant commission fee as gross sales (i.e. GBP0.98 in our example above: its acquirer/processor fee of GBP0.23, the interchange fee of GBP0.70 and the GBP0.05 that is paid to the card payment network). **As such, we advise not taking into account net sales** (which is closer to a gross margin) **when making profitability comparisons with peers.** In all, Worldline is the only group not to communicate gross sales. Indeed, its sales are made up of its commission fee and that of the card scheme (i.e. excluding interchange fees), thereby making certain adjustments necessary when comparing margins and caution when using EV/sales multiples (reintegration of the interchange fee to find the gross revenue).

Fig. 76: Recognition of sales for PSPs we cover

Revenue recognition for Worldpay, Wirecard and Ingenico	Revenue recognition at Worldline
Fee retained by the acquirer	Fee retained by the acquirer
+ Fee paid by the acquirer to the issuer (interchange fee)	+ Payment network fee
+ Payment network fee	**= Merchant service fee - interchange fee**
= Merchant service fee = Gross revenue	

Source: Bryan, Garnier & Co ests

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Stock rating

BUY	Positive opinion for a stock where we expect a favourable performance in absolute terms over a period of 6 months from the publication of a recommendation. This opinion is based not only on the FV (the potential upside based on valuation), but also takes into account a number of elements that could include a SWOT analysis, momentum, technical aspects or the sector backdrop. Every subsequent published update on the stock will feature an introduction outlining the key reasons behind the opinion.
NEUTRAL	Opinion recommending not to trade in a stock short-term, neither as a BUYER or a SELLER, due to a specific set of factors. This view is intended to be temporary. It may reflect different situations, but in particular those where a fair value shows no significant potential or where an upcoming binary event constitutes a high-risk that is difficult to quantify. Every subsequent published update on the stock will feature an introduction outlining the key reasons behind the opinion.
SELL	Negative opinion for a stock where we expect an unfavourable performance in absolute terms over a period of 6 months from the publication of a recommendation. This opinion is based not only on the FV (the potential downside based on valuation), but also takes into account a number of elements that could include a SWOT analysis, momentum, technical aspects or the sector backdrop. Every subsequent published update on the stock will feature an introduction outlining the key reasons behind the opinion.

Distribution of stock ratings

BUY ratings 60.2% NEUTRAL ratings 30.8% SELL ratings 9%

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15	Other disclosures	Other specific disclosures: Report sent to Issuer to verify factual accuracy (with the recommendation/rating, price target/spread and summary of conclusions removed).	No

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