



Innovations in P2P lending may put computers over people

## Welcome to the machine

November 2009



**P2P lending is an alternative way of originating loans (mostly) without banks.** Peer-to-peer (P2P) lending sites broker small loans between savers and lenders online. The loans are usually unsecured so that lenders bear the full credit risk. Since 2005, many P2P lending sites have popped up around the globe (see [E-Banking Snapshot 22](#) for more background). There are substantial differences between the sites: Kiva, for instance, channels loans towards entrepreneurs in developing countries, whereas other sites target lenders and borrowers in mature markets. [chart 1](#)

**The largest sites in the US have originated loans worth more than USD 200 m in total.** This is, however, only a tiny fraction of the overall volume of outstanding consumer loans in the US – which stands at USD 2.4 trillion. [chart 2](#)

**High interest rates and media coverage attract lenders.** Many German lenders, for instance, flock to P2P lending because the promised interest rates exceed that of, say, bank deposits. The flipside is of course, that loans are not necessarily cheaper than those offered by traditional financial firms. [chart 3](#)

**Lenders may underestimate risks.** At Smava, a German P2P lending site, lenders do not bear the full credit risk because losses (on the principal, not the interest) are spread pro rata to all loans of the same credit grade. This encourages risk taking. In fact, more than one-third of all loans at Smava are awarded to business owners or self-employed professionals. Their credit grades may underestimate the true risk because the grades may reflect personal credit history, not that of the business. [chart 4](#)

**Selection and pressure by peers lose importance.** In the early days of P2P lending, borrowers could join a group of like-minded borrowers and get endorsements from friends as a way to signal quality and their commitment to repaying the loan. Group members used to have lower default ratios. But peer pressure seems to recede in mature markets: few sites even feature groups and lenders tend to focus more on quantitative indicators instead. This year, only 13 new groups were created at Smava and they featured only one loan in total. [chart 5](#)

**Innovations in P2P lending shift power towards computers.** Not all lenders fancy reading all the loan bids. Therefore, some sites have introduced automatic bidding and secondary markets. They allow lenders to bid on loan requests automatically that match some pre-defined metrics and to trade existing loan notes on dedicated platforms. This injects new professionalism into P2P lending but also shifts power from people to computers. [chart 6](#)

**Borrowers need to explain their situation.** Borrowers at Lending Club use on average 370 characters to describe their loan request. They write more if their credit grade is bad. Each notch downward (there are 35 from A1 to G5) is statistically associated with 3.5 additional characters. [chart 7](#)

**Ignore explanations at your own peril.** Lengthy explanations tend to increase the chances of getting funded but are also associated with a higher delinquency risk – other things being equal. As it appears, borrowers with a more complicated background need to explain that at length to prospective lenders who can then make informed choices. Lenders who ignore this information might load up too many bad loans during this downturn. [chart 8](#)

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### Varieties of P2P lending

Examples

	Zopa	Prosper	Kiva	Smava
<b>Region</b>	UK (US, IT, JP)*	US	Global	DE
<b>Purpose</b>	Profit	Profit	Poverty alleviation	Profit
<b>Loans</b>	Listings & matching	Listings	Listings	Listings
<b>Credit risk</b>	Lender	Lender	Lender	Lender pool
<b>Interest rate</b>	Auction & matching	Auction	None	Set by borrower
<b>Secondary trading</b>	No	Yes	No	No
<b>Automatic bidding</b>	No	Yes	No	Yes

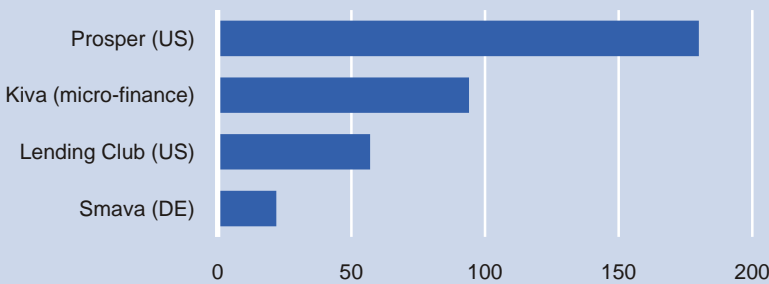
\*planned. Source: DB Research, 2009

1

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### Out of kindergarten

Total value of originated loans since inception at selected P2P lending sites (USD m)



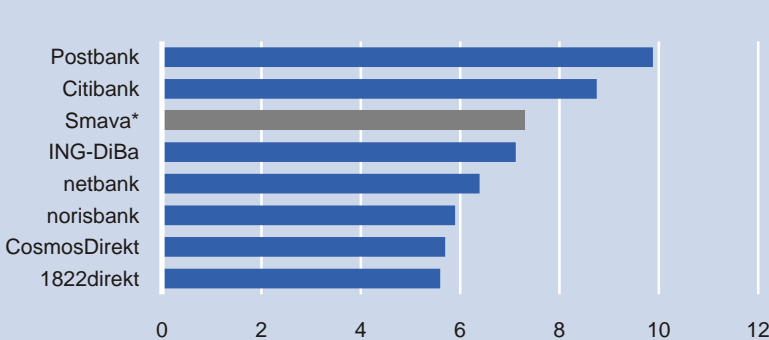
Zopa does not disclose lending volumes. Sources: Company websites, as of 29 Sep 2009

2

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### Not necessarily cheaper

Effective rate of interest on a EUR 10,000 unsecured loan, 36 months duration, medium credit quality in Germany (selected offers)



\*expected

As of 29 Sep 2009. Source: FMH Finanzberatung, 2009

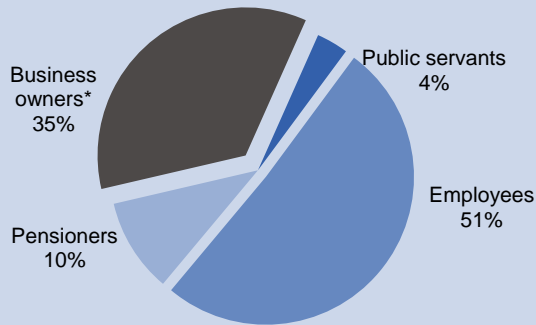
3

High interest rates and media coverage attract lenders. Many German lenders, for instance, flock to P2P lending because the promised interest rates exceed that of, say, bank deposits. The flipside is of course, that loans are not necessarily cheaper than those offered by traditional financial firms. [back to front page](#)



### Many loans to business owners

Loans by occupation of the borrower at Smava (DE), %



\* Include self-employed, entrepreneurs and owner-managers

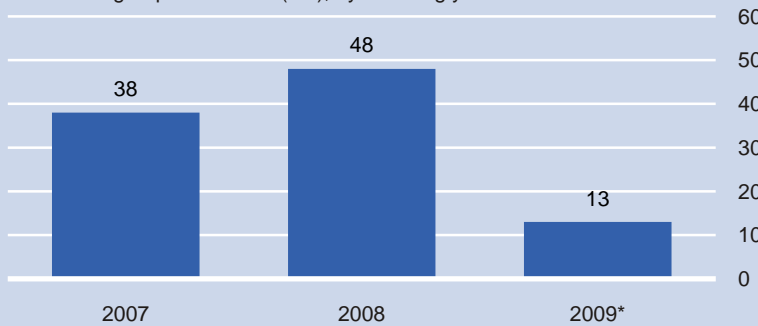
Sources: DB Research, Smava, Wiseclerk.com, 2009

4

Lenders may underestimate risks. At Smava, a German P2P lending site, lenders do not bear the full credit risk because losses (on the principal, not the interest) are spread *pro rata* to all loans of the same credit grade. This encourages risk taking. In fact, more than one-third of all loans at Smava are awarded to business owners or self-employed professionals. Their credit grades may underestimate the true risk because the grades may reflect personal credit history, not that of the business. [back to front page](#)

### Fewer new groups

Number of groups at Smava (DE), by founding year



\* Until October 2009

Sources: DB Research, Smava, 2009

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Selection and pressure by peers lose importance. In the early days of P2P lending, borrowers could join a group of like-minded borrowers and get endorsements from friends as a way to signal quality and their commitment to repaying the loan. Group members used to have lower default ratios. But peer pressure seems to recede in mature markets: few sites even feature groups and lenders tend to focus more on quantitative indicators instead. This year, only 13 new groups were created at Smava and they featured only one loan in total. [back to front page](#)

### Professional tools rather than peer pressure

Major developments in P2P lending

**Automated bidding allows to generate bids according to pre-defined metrics:** Personal impressions derived from loan descriptions do not count.

**Some sites facilitate secondary trading of P2P loans:** Users can trade existing loan notes on dedicated trading platforms. This increases liquidity. New lenders can also diversify their portfolios across time by buying older loan notes.

P2P sites in the US need approval from the Securities and Exchange Commission .

Source: DB Research, 2009

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## Borrowers need to explain their situation

Length of loan description (no of characters), by credit grade



Credit grades decrease from A (best) to G (worst)

Sources: DB Research, Lending Club, 2009

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Borrowers need to explain their situation. Borrowers at Lending Club use on average 370 characters to describe their loan request. They write more if their credit grade is bad. Each notch downward (there are 35 from A1 to G5) is statistically associated with 3.5 additional characters. [back to front page](#)

## Mind their words

**Dependent variable:** Repayment is late or in default (dummy)

**Data sample:** 10790 loans at Lending Club

**Method:** Logit regression

### Explaining variables

<b>Credit Quality</b> (One notch from good to bad)	0.044*** (0.006)
<b>Amount borrowed</b> (USD '000)	0.090*** (0.007)
<b>Length of loan description</b> (in '000 characters)	0.213** (0.100)

**McFadden R<sup>2</sup>** 20%

Levels of statistical significance: \*\*\*1%, \*\*5%, \*10%

Time trend accounted for. Sources: DB Research, Lending Club, 2009

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Ignore explanations at your own peril. Lengthy explanations tend to increase the chances of getting funded (not shown) but are also associated with a higher delinquency risk – other things being equal. As it appears, borrowers with a more complicated background need to explain that at length to prospective lenders who can then make informed choices. Lenders who ignore this information might load up too many bad loans during this downturn. [back to front page](#)

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