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Spatializing the future: financial expectations, EU convergence and the Eastern European Forex mortgage crisis

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Abstract

Existing accounts of failure to predict the financial crisis focus on the complexity of the financial system, and are less useful for understanding crises in non-securitized markets. We examine the roots of optimism leading up to the Eastern European mortgage crisis through the case of Hungary, and use recent theories of expectations, which understand them as both pragmatic and fictional practices that commonly incorporate narratives. Based on archival research and interviews with bankers, regulators and legislators, we demonstrate how the EU convergence narrative was central in forming optimistic expectations. Fusing the underspecified convergence process with an orientalist geographical imaginary, this narrative and its associated measures translated growing indebtedness as 'catching up' with Europe, de-emphasized exchange rate risk through a belief in European convergence and precluded crisis scenarios originating in the European Union. Our findings contribute to theories of how economic expectations are formed, stabilized

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and maintained by developing the concept of 'spatializing the future', denoting practices that handle uncertainty by charting the future as movement in concrete geographical or abstract space, along externally verifiable pathways.

Keywords: expectations; mortgage markets; foreign-currency lending; future; Hungary; financial crisis.

Those planning to take out a long-term loan can safely choose foreign-currency-based products because it is unlikely that an exchange rate change that would significantly increase repayments would occur during the term of the loan ... Thus, there is no need to be scared that households taking out loans in foreign currency would incur losses due to the exchange rate risk. (Hungarian Banking Association cited in MTI, 2006)

Between 2003 and 2010, the Hungarian mortgage market experienced a spectacular fourfold growth from \$3.6 billion to \$14.4 billion (Schepp & Pitz, 2012). The growth was fuelled by foreign-currency-denominated mortgages (henceforth: Forex mortgages). These could be obtained at substantially lower interest rates than Hungarian forint loans, but they were repayable in forint at the current exchange rate. As the US financial crisis reached Europe, the forint plummeted. Monthly payments on Forex mortgages grew by as much as 80–90 per cent,¹ and defaults soared. Similar crises swept through the region, causing what some in central banking referred to as the Eastern European equivalent of the sub-prime mortgage crisis.²

In recent years, a substantial literature has emerged on why economic actors did not see the US and UK sub-prime crisis coming, and found the core cause in the securitized markets' intractable complexity. The 'toxic' mortgages of the Eastern European region, however, were neither securitized nor sub-prime: Swiss franc mortgages were lent out largely to middle-class borrowers and were kept on banks' books. Unlike the chains of mortgage securitization, foreign-currency lending was a transaction that banks and regulators, at least for the most part, understood.

This 'simple crisis' compels us to ask why actors did not see it coming. Specifically, what were the sources of optimistic expectations of key institutional actors about mortgages in the period leading up to the crisis? In this paper, we examine this question through the case of Hungary, one of the worst-hit countries of the region. We focus on one source of optimistic expectations that our research revealed as particularly pertinent: the European convergence narrative.

Focusing on expectations is not alternative, but complementary to economic geography and political economy accounts, according to which the Central and Eastern European (CEE) mortgage expansion was driven by high interest rates in the (semi)periphery, allowing high margins for subsidiaries of Western-European banks and cheap loans for local borrowers (Smith & Swain, 2010). Interest rate differentials did exist; however, to interpret them as signals of

profitable opportunities (Vollmer, 2016), actors had to form optimistic expectations about the future. As Beckert (2013b) argues, expectations are the ‘micro-foundations of political economy’ (p. 323).

Analysing these expectations, we show that they were based on a narrative of European convergence, which translated the uncertain future into a seemingly certain spatial trajectory leading towards the European Union. This narrative allowed actors to interpret growing indebtedness as a sign of ‘catching up’ (*felzárkózás*) to the more developed Europe and precluded scenarios of a crisis originating there. We argue that this narrative did not simply acknowledge the ongoing EU and future Eurozone accession process. Rather, it tackled uncertainty by mobilizing the older, developmentalist Westernization narrative prevalent in the region. The convergence narrative fell back on the developmentalist narrative’s tropes when uncertainty arose; and it was the developmentalist narrative’s legacy that lent the convergence narrative legitimacy and power to withstand contradicting information.

Our findings contribute, firstly, to the scholarship on the failure to predict the global financial crisis by extending the focus of analysis to the foreign-currency mortgage crises outside the Western core. Secondly, theoretically, we contribute to the literature on how expectations are formed and maintained in the economy, building on previous work examining the role of narratives in this process (Beckert, 2013b, 2016; Chong & Tuckett, 2015; Esposito, 2011). We develop the concept of ‘spatializing the future’, which refers to expectation-formation practices that chart the future as a movement through space along locations of a moral cartography. Further, we show its role in legitimizing, maintaining and sharing expectations across a set of economic actors in the market.

The paper is structured as follows. In the first section, we start with an overview of ‘knowledge failures’ (Bryan *et al.*, 2012, p. 301) in predicting the financial crisis, and move on to theories on the formation of expectations more broadly. We bring a different set of theories, developed originally for understanding spatial hierarchies and the European convergence programme, to bear on the question of expectation-formation. After introducing our archival and interview methods, and the Hungarian case, we present our findings, detailing how spatialized expectations of a European convergence narrative contributed to a favourable outlook on the growth of mortgage lending. In the concluding section, we discuss the implications of spatial narratives for the crisis and for the formation of economic expectations.

Economic expectations and imagined geographies

Foreseeing the unforeseeable: predicting the future in the economy

The question of why actors did not foresee the global financial crisis has been overwhelmingly framed as a problem of knowledge, in particular, of

predictability and techniques of knowing the complex, securitized sub-prime market (Bryan *et al.*, 2012; Langley, 2008a, 2008b). According to one set of arguments, the specific models used prevented predicting such an event. Models excluded low-likelihood ‘Black Swan’ events (Taleb, 2007); were forged from multiple evaluation cultures (MacKenzie, 2012); had problematic assumptions such as rising home prices (Goldstein & Fligstein, 2014; MacKenzie & Spears, 2014); and did not capture the complexity of economic life (Langley, 2008a, 2008b). The second set of explanations suggested that knowledge became selective due to passive ignorance from information overload generated by transparency requirements (Dorn, 2012), ‘strategic ignorance’ of known facts (Davies & McGoe, 2012; McGoe, 2012), technocrats’ detachment from the bricolage of financial innovation (Engelen *et al.*, 2012) or collective calculative behaviour through which oversight was amplified (Beunza & Stark, 2012). In a third set of accounts, incentive structures encouraged short-term calculation of self-interest despite knowledge of danger (Engelen *et al.*, 2012). Finally, arguments about the ‘pretence of knowledge’ suggested that disaster arose from risk-based finance and monetary policy overstating its capacity to predict the inherently uncertain future (Beckert, 2013b; Braun, 2015; Engelen *et al.*, 2012; Langley, 2008b).

These explanations, largely focusing on knowability and its constraints, emphasize the complexity of innovative financial products and of a burgeoning financial system. However, they offer only partial answers to crises which originate in rather standard risks: mortgage default risk and exchange rate risk.

To understand crises in which the complexity of products or of the financial system is not a key driver, we return to the general question of how expectations of the future are formed in the economy. The central paradox, as Braun explains, is that economic action is future-oriented, yet the future is not knowable. To make action possible, ‘defuturizing’ techniques are employed (Luhmann, 1976; cited in Braun, 2015, p. 368), which bring the future into the present, into something familiar and, ultimately, actionable.

The sociology of finance has mostly focused on the properties of risk as a key defuturizing technique, using Knight’s distinction (1921) between calculable *risk* and inherently unpredictable *uncertainty* – that element of the future which cannot be transformed into risk through probabilistic calculative procedures.³ Drawing on O’Malley and Beckert, we cut across this distinction by using the notion of *expectations*. For O’Malley (2000), expectations fall between calculated risks and unknowable uncertainty as ‘specific forms of common sense associated with pragmatic business reasoning – forms that render the future “foreseeable” but not necessarily “calculable”’, encompassing a contingent set of shared assumptions and practices ‘distinct from both statistical and expert-based calculation’ (p. 461) ... ‘derived from imageries of entrepreneurial calculation’ (p. 478). Expectations are also central to Beckert’s (2013a, 2013b, 2016) seminal work on ‘fictional expectations’ in the economy. Using Knight’s concept of uncertainty, Beckert suggests that expectations are always ‘fictional’ – not in the sense of being arbitrary, but in the sense of

containing an inescapable interpretive element. Without fictional expectations, economic action would not be possible under conditions of uncertainty (Beckert, 2013a; Esposito, 2011).

Beckert argues that focusing solely on calculative practices misses the point that these calculations rely on assumptions about ‘an imagined future state of the world’ (Beckert, 2013b, p. 220; see also Esposito, 2011). This also applies to risk assessment and to building lenders’ confidence, which ‘must be created and maintained through discursive processes’ (Beckert, 2016, p. 129). Therefore, in this paper, we take a step back from dissecting forecasting models, and inquire into the fictional expectations that made calculation of the future possible.

We draw on prior research that highlights narratives as one of the fundamental ways of creating and maintaining fictional expectations across the economy (Beckert, 2013b; Czarniawska, 1997; Mützel, 2013). These narratives tell ‘how the future will look and how the economy will unfold into the future from the current state of affairs’ (Beckert, 2016, p. 10). Even point forecasts are based on narratives as

[u]nderlying any imaginary of a specific future state is a story of how the present will be transformed into the depicted future through causally linked steps ... Stories provide causal links to show how the gap between the present state of the world and the predicted future state will be closed. (Beckert, 2016, p. 69)

Chong and Tuckett (2015, p. 309) suggests that ‘conviction narratives’ instil conviction about the future through emotionally arousing ideas that help dispel doubt. In the extreme, ‘phantastic objects’ help maintain conviction by creating ‘a divided state’ (Tuckett *et al.*, 2014, p. 121) of mind, which allows individuals to ignore contradicting information (Chong & Tuckett, 2015; Tuckett *et al.*, 2014). Related research has identified further cultural dynamics of producing conviction in expectations and maintaining them in the face of doubt. Boccara (2014, p. 33) suggests that ‘shared idealized representations’ of a nation impede decision-makers from acknowledging warning signs that contradict them. Pelkmans (2017), in contrast, argues that doubt is crucial for conviction to be maintained: ideas that need to be defended against doubt – as opposed to taken-for-granted ideas – are the most likely to motivate action. Doubt produces ‘productive tension’ (Pelkmans, 2017, p. 175), which, rather than undermining belief, allows it to gain and maintain traction.

Moving the focus to the institutional embeddedness of expectations, ethnographic studies of regulators and banks shows how forecasting depends on institutional interpretations of models and data (Zaloom, 2009) and how these interpretations may be entrenched in specific institutional interests (Abolafia, 2004, 2010; Davies & McGoey, 2012). Interpretative schemes shared by multiple institutional actors, in turn, allow these schemes to gain legitimacy and to dispel doubt about decisions informed by them (Bronk & Jacoby, 2016; Engelen *et al.*, 2012). Inquiring into the processes that make such sharing

possible, Braun (2015), for example, shows how the communication between the European Central Bank and banks helped perform 'rational' expectations.

Complementing the focus on human cognitive, emotional and interpretive processes, the Social Studies of Finance highlights that calculating and planning the future has a socio-technical dimension (e.g. Beunza & Stark, 2004). Expectations are practical accomplishments and concrete instantiations of the future, materialized in plans and scenarios through planning tools (Andersson *et al.*, 2015; Giraudeau, 2008).⁴ Based on studies of marketization, we can conceive of expectations as a set of practical and situated activities involving distributed cognition and concrete technologies or devices (Callon & Muniesa, 2005; Hutchins, 1995; MacKenzie & Spears, 2014). It is through particular devices that institution-specific, as well as shared, expectations materialize.

Taken together, these arguments suggest that to understand how optimistic expectations were possible in a market, one must examine how expectations – conceived as pragmatic, imagined, yet material amalgams of calculation and narrative – were formed and maintained by multiple institutional actors.

Mapping the future through space: imagined geographies

To situate expectations about foreign-currency mortgages in the Eastern European setting, we mobilize theories of orientalism applied to Eastern Europe, hitherto disconnected from the sociology of the future scholarship. This literature focuses on how geographic imaginaries naturalized the relationships of domination between what they constructed as East and West. Seemingly unrelated to the question of how expectations are formed, this body of work brings an important new dimension, as it identifies narratives that, first, endow geographical space with symbolic meaning and, second, chart the future as a movement of 'development' between these spatial categories.

The moral classificatory system that created a Europe consisting of a coveted West and an inferior East has a well-documented history. Taking Said's (1980) theory of orientalism as their starting point, scholars have traced how Eastern Europe was 'invented' in the eighteenth and nineteenth centuries: the region came to be referenced as a whole and was ascribed properties that signified Otherness and inferiority (Wolff, 1994). Although not technically colonies, these countries 'self-colonized' themselves (Kiossev, 2000), adopting the West's orientalizing gaze and seeing their own region as inferior (Todorova, 1997). This moral geography continued to define the region's repositioning in Europe after 1989. According to the ruling transition narrative, Central and Eastern Europe had been part of the West but experienced a temporary throwback under Soviet-style socialism: moving spatially eastward and temporally backward. Afterwards, the region would 'return to' the West and all it entails, including market economy and liberal democracy (Smith, 2002), following the developmental path of Western countries. The 'East–West slope' of

development (Melegh, 2006) and catching up to Europe became central to the local post-socialist political discourse.

This developmentalist narrative was foundational in the EU accession process of Eastern European countries (Smith, 2002). The discourse of 'Eastern enlargement' resonated with orientalism (Kuus, 2004). In the newly joining countries, belonging to Europe became a 'disciplining device used by hegemonic actors to confer or deny legitimacy' to local actors (Clark & Jones, 2011, p. 296), fostered both by EU (Kuus, 2004) and local elites' discursive strategies in the 2004 accession wave (Clark & Jones, 2011; Moisio, 2007).

For the sociology of the future, these arguments are important because they highlight the legacy of a specific temporal-spatial expectation practice in the region, which charts the future of Eastern countries as 'moving closer' to the Western states. We bring these theories to bear on the question of how actors in Central and Eastern Europe (CEE) formed optimistic expectations and, specifically, on the role played by the EU convergence narrative in the process. Before we do that, however, we want to clarify the status of the actual economic process of EU convergence in relation to the formation of expectations.

What is imaginary about EU convergence?

While the central argument regarding orientalist developmental narratives is that the East-West differences are socially constructed, EU convergence is arguably everything but constructed. Accession to the European Union involves the compulsory harmonization of legal frameworks, and Eurozone entry is tied to a set of macroeconomic conditions known as the Maastricht criteria. The European Union also has a broad set of regulatory measures as well as structural and cohesion funds designed to facilitate convergence. Hence, the developmental narrative, suggesting that less developed countries will become similar to the developed ones, is not just a metaphor but a programme that is actively pursued. In this light, in what sense are expectations based on the EU convergence process constructed or fictional? Are they not simply an acknowledgment of the actual convergence process?

Not necessarily. Firstly, convergence is a contested question. While international governing bodies (from the IMF to the European Union) treat Eastern Europe's convergence as a fact – the only question being how soon it will happen – scholars in the dependency school and world systems theory argue that the European Union's convergence measures do not lead to the promised 'catching up' of 'laggard' economies. Rather, they cement regional inequalities by enforcing neoliberal policy that benefits capital-rich and established countries, and by putting in place economic structures that channel profits from the semi-periphery countries of Eastern Europe to the Western core (Becker *et al.*, 2015; Böröcz, 2012; Dale, 2011; Geröcs & Pinkasz, 2018). In the context of finance, scholars have highlighted the

uneven, ‘dependent financialization’ (Gal, 2015) of Eastern Europe. EU accession in 2004 accelerated deregulation and international privatization, leading to the dominance of foreign-owned banks in post-socialist countries. Prior to the mortgage crisis, these large banks supplemented their decreasing Western European margins by lending in the lucrative Eastern markets, often in foreign currency, repatriating large profits (Becker *et al.*, 2015; Gal, 2015; Raviv, 2008).⁵

Secondly, the European Union’s policy measures for convergence only refer to certain elements of the economy, and mortgage debt is not one of these. Macroeconomic criteria, legal harmonization and financial regulations do not specify that mortgage institutions or market designs have to become similar. Indeed, mortgage institutions and mortgage indebtedness show a wide variety across Europe, which do not map onto GDP per capita differences (Schwartz & Seabrooke, 2008). There is debate on whether mortgage markets will maintain diversity, or converge – not in any programmatic way but due to the indirect effect of the European Union’s liberalization policy (Fernandez & Aalbers, 2016). As this debate indicates, the question of how convergence policies will affect local mortgage markets is contested, with no clear pathway to be deduced from the ‘actual’ convergence process.

These points allow us to analyse the EU convergence narrative through the theoretical lens of ‘fictional expectations’. While the EU convergence programme is real, it does not mean that the future of the mortgage market is determined by it. It leaves ample room for different future scenarios. We use the term ‘imaginary futures’, constructed through symbolic ‘imaginary geographies’, to reflect on these possibilities, which are not detached from the ongoing convergence process, but represent different takes on its consequences and its future trajectory.⁶

Research methods

The empirical data used in this paper were generated from a larger project that traced the development of the Hungarian mortgage market from its design in 1996 until 2014, the end of its deepest crisis. The archival material consisted of all parliamentary debates (referenced as PD, 1997–2014), laws and government decrees (L&D, 2000–2011) related to mortgages, Reports on Financial Stability issued by the Central Bank of Hungary (SR, 2000–2014), periodic reports of the Hungarian Financial Services Authority (PSZÁF, 2000–2012), annual reports of the Hungarian Banking Association (Bankszövetség, 2001–2011), and reports issued by the Parliamentary investigative committee on mortgage lending (PIC, 2012).

Complementing the documentary evidence, we carried out 40 expert interviews, including with key decision-makers in the Hungarian mortgage market. Between them, 20 interviewees worked at banks in various mortgage-related functions (product development, risk management, marketing, branch

and bank management, etc.); seven at the Central Bank of Hungary; four at the Financial Supervisory Authority and its predecessor; eight were employees of the Ministry of National Economy and its predecessor, the Ministry of Finance; four were Members of the Hungarian Parliament; and six were other experts, including employees of the Economic Competition Authority, real estate agents and mortgage lawyers. Interviews were anonymized. As interviewees often worked at multiple banks and regulatory bodies over their careers, indicating their consecutive workplaces would have made them identifiable; therefore, we used multiple codes for every interviewee, each corresponding to a different organization. For example, if someone worked at the Ministry of Finance and then at a bank, that person received one code for the first and another for the second period.

The data were analysed using discourse analysis (Tonkiss, 2004) in NVivo with a focus on how actors formed optimistic expectations about the mortgage market. Progressing from open coding to increasingly abstract categories, we discerned several answers to this question. We established the validity of these answers by checking our interpretations against the data and triangulating within and between data sources.

In this paper, we explicate one theme that emerged as particularly relevant to understanding the Central and Eastern European crisis. We do not aim to account for all aspects of expectations; nor can we fully explore here either dissent or why a particular narrative became dominant. What we demonstrate is how the EU convergence narrative helped shape expectations prior to the crisis.⁷

The development of the Hungarian Forex mortgage market

In 2002, variable-rate foreign-currency-denominated (Forex) mortgages appeared in Hungary, offered at 6–8 per cent lower rates than forint mortgages (Király & Banai, 2014). By 2010, the total value of home mortgages rose fourfold (Schepp & Pitz, 2012), due almost exclusively to Forex mortgages (Figure 1). By 2011, 15.2 per cent of households had a mortgage and an additional 3.9 per cent a home equity loan (KSH, 2011), with 55 per cent of the former and 82 per cent of the latter denominated in foreign currency (Balas *et al.*, 2015). A total of 88 per cent of Forex mortgages were denominated in Swiss francs (authors' calculation based on data from MNB, 2011).

To lend out mortgages that run for 10–20 years, banks obtained short-term funds from international money markets and from their foreign parent banks (Banai *et al.*, 2012). This short-term financing made the cost at which funding could be renewed uncertain, as these costs depended on the exchange rate, the foreign interest rate and on Hungary's country risk. Mortgage contracts delegated these risks entirely to borrowers, tying the mortgage's variable interest rate to the banks' changing financing costs (Schepp & Pitz, 2012).

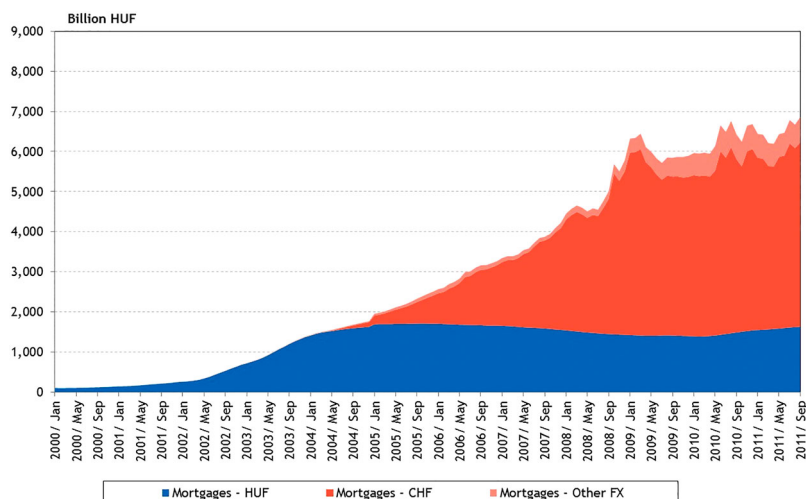


Figure 1 Household loan portfolio of the banking system 2000–2011

Source: Király & Banai (2014, p. 11).

When the financial crisis and the European sovereign debt crisis led to concerns about the US dollar and the euro, investors turned to the Swiss franc as a safe currency. Increasing demand fuelled the franc's appreciation, which was coupled with decreased investor confidence in Central and Eastern European markets. The forint was devalued, and Hungary's country-risk premium rose, resulting in elevated financing costs. These were relayed to borrowers, resulting in a sharp increase of monthly mortgage instalments. By 2011, 28 per cent of Forex mortgage and 43 per cent of Forex home equity borrowers were in arrears, with 10 per cent and 18 per cent over the default threshold of three months, respectively (authors' calculations based on data from MNB, 2014).

Cartographies of the future

This disastrous scenario that eventually materialized was largely absent or dismissed as unlikely in expectations preceding the crisis. In what follows we show the role of a spatialized set of expectations, governed by a convergence narrative, in this dismissal. In the first step, we focus on how this narrative informed expectations. We use *Europe* as an umbrella term for the diverse, overlapping and often vague spatial narratives that posit a Western European or EU region, or a single country as their endpoint. In the second step, we delve into the heterogeneity and ambiguity surrounding actors' conception of Europe. We will use the term *convergence narrative* to describe the ways in which actors referred to the ongoing EU and anticipated Eurozone accession process in their expectations. The term *developmentalist narrative* will refer to

the orientalist Westernization narrative discussed earlier, which has a long legacy in the region; while the term *actual convergence process* refers to the concrete steps involved in the EU and Eurozone accession.

How the spatialized convergence narrative precluded crisis expectations

One of the most important expectations that banks, regulators and policy-makers formed was that over time the Hungarian mortgage debt level will increase to those of Western countries. This belief, as one of our banker interviewee recalls, was also widely held by foreign investors (S53):

Investors saw that Hungary's indicators were below the indicators of Western-European [countries]⁸ ... So externally, from a strategic point of view, benchmarks and statistical methods showed that in Hungary the banking market is about to grow massively. ... So, this type of benchmark-based planning and all, it really showed an enormous growth potential in mortgage lending. (S53)

Similar predictions were formulated by Central Bank analysts, comparing CEE countries to Western Europe, and interpreting the difference as a sign of future growth. Stability Reports noted that 'Household debt ratio compared to the GDP is lagging far behind the rates observable in countries of developed market economies; this suggests the possibility of potential rising household lending' (SR, 2000/August). Reports concluded 'great catching-up potential' (SR, 2005/October) in the lending-to-GDP ratio (known as the 'depth of financial mediation') based on the fact that it was lower than in the EU-15 states.

Measures of differences in the present, such as country comparisons of debt-to-GDP ratios, could be incorporated into expectations due to the assumption that Hungary must converge to *Europe* over time, as these quotes illustrate. This narrative referenced the ongoing EU accession process, yet also resonated with the familiar developmentalist narrative of the region. It placed countries on a continuum stretching from less developed to more developed ones and envisaged the future of Hungary as a movement towards its Western destination along the developmental pathway.

The conflation of the convergence narrative with the developmentalist narrative, as we will show in the following sections, played a central role in foreclosing scenarios of the crisis to come. First, it framed growing indebtedness as a sign of development, which can only be threatened by not being fast enough. Second, it downplayed the Swiss franc currency risk by blurring differences within Europe. Third, it excluded scenarios of a crisis originating in the West.

Growing indebtedness as catching up with Europe. One way in which the convergence narrative foreclosed scenarios of the forthcoming crisis was through the markedly developmentalist assumption that diminishing differences between Hungary and Western Europe must, by definition, mean 'development'. This

assumption is surely tenable when applied to living standards; but less so when it is extended to indebtedness, whose desirability is contestable. The concrete ways in which this assumption informed expectations differed across regulators, policymakers and banks, due to their different institutional expectation practices; yet they all shared this element.

Regulators' key concern was whether to intervene in the growing mortgage market. The Central Bank of Hungary, beyond its primary role of inflation targeting, was responsible for financial stability. In theory, it could curb Forex lending by setting higher compulsory reserve rates for these types of loans. The stability question was whether mortgage growth was on an 'equilibrium path' or experiencing an overheated boom. The facts of the actual convergence process provided little guidance, partly because the question itself was normative rather than factual, and partly because convergence requirements did not refer to mortgage lending. The answer to this question infused the convergence narrative with the developmentalist narrative that posited an unquestioned reference point: Western European countries' indicators served as benchmarks against which the normalcy of market development was measured. Convergence to these indicators was seen as desirable, while divergence was interpreted as lingering backwardness.

Through this lens, higher debt rates were consistently seen as the norm to be emulated. Using a markedly developmentalist language, the Central Bank hailed growing mortgage debt as a laudable sign of 'catching up' (SR, 2005/October), decreasing Hungary's '*elmaradás*' (SR, 2003/June), which means lag, in the sense of literally being left behind or being underdeveloped. Its opposite is '*felzárkózás*', which means catching up in the sense of a race or in development:

The mortgage boom of the last three years substantially decreased Hungary's *lag* (*elmaradás*) in household indebtedness ... The [household] sector's indebtedness has substantially grown, the extent of the *lag* compared to the Eurozone has decreased to one-third. (SR, 2004/June)

The net growth of the borrowing/consumption ratio can be considered a natural phenomenon, which can be related to the *catching-up* (*felzárkózási*) processes. (SR, 2008/April)

Reflecting the spatial-temporal logic of the developmental narrative, the 2004/December Stability Report stated that 'in the past years, the household sector *has gotten closer* in terms of its indebtedness level to the level characteristic of developed countries, measured as a ratio of income'. Diminishing difference on given indicators meant moving closer to Europe.

The same spatial convergence-as-development narrative permeated the Central Bank's economic modelling, which aimed to assess if Hungary had a credit boom, requiring intervention. A research paper that became crucial in deciding this internal debate used data for the EU-15 countries between 1980 and 2002 and described how credit growth moved together with GDP

growth, interest and inflation rates. The correlations observed in these countries in the past were taken as the 'equilibrium path' for Hungary. Taking others' pasts as the norm against which current CEE states were judged and their optimal future predicted, the paper concluded that a 'large part of the credit growth in new member states can be explained by the catching-up process' (Kiss *et al.*, 2006, p. 4), even while noting that Hungarian household credit growth exceeded the long-term equilibrium rate. The application of the developmentalist convergence narrative to debt measures made rapidly growing indebtedness seem normal and desirable.⁹

In *legislators'* projective work, Europe was used as the ultimate normative argument in debates about the right course of action, by both of the major political parties, the populist-conservative Fidesz and the neoliberal-socialist MSZP (Magyar Szocialista Párt). The 2000–2001 mortgage subsidy programme, introduced by Fidesz, was justified by the need to end the 'untenable situation' that 'while in Western-Europe, 85 per cent of a flat's price is financed by a mortgage, in this country the rate does not even reach 20 per cent' (Sasvári in PD, 1999). Similarly, Fidesz's arguments between 2003 and 2009 in favour of reintroducing mortgage subsidies were justified by people's right to 'procure themselves with a European standard of life' (Mádi in PD, 2004).

For *banks*, the convergence narrative was the fabric of benchmarks that were based on the growth trajectory charted by selected European countries, as several interviewees explained (S53, S63). With foreign banks owning 70 per cent of the mortgage market in 2003 (Banai *et al.*, 2011), benchmarks were set mostly by Hungarian banks' European (or in a few cases US) headquarters. Benchmarks defined target results in management compensation, which trickled down to sales plans and incentive programmes for branch managers and even individual employees (S63). These targets put banks under strong 'growth pressure', according to a risk analyst for the region at the international headquarters of a major bank in Hungary (S54), while pressure to perform moved the sales targets continually upward (S63). Bank competition was most intense in Hungary and Poland, yet high local interest rates limited loan amounts and the range of people that could afford them. Targets informed by Western European levels were met only by introducing Forex loans which offered lower rates.

By focusing on the measurement of 'catching-up', the convergence narrative excluded scenarios that would achieve the developmental targets *quantitatively* while creating other problems, such as modifying the product *qualitatively* – to being denominated in another currency – in an effort to reach the expected levels. This excluded the possibility of crises that might happen in spite of, or even because of, catching up with European debt levels.

Homogeneous Europe: downplaying the risks of Forex lending. The convergence narrative desensitized market participants not only to the risks of growing debt, but also to those of foreign-currency lending. Regulators, legislators and banks formed the concrete expectation that Hungary will join the Eurozone in the medium term, eliminating the euro–forint currency risk:

In 2004, looking forward, everybody said that, oh, wow, we have joined the EU. We are going straight ahead, there is no risk in it [in Forex mortgages]. And the communication was that we will join the Eurozone a few years after the accession, in 2008. If we join, then the risk gets eliminated. (S65, banker, board member of the Banking Association)

In 2004–2005, the EU prospects were very positive. At the time, there was even an eventuality of joining the Eurozone with an even stronger forint. And there were opinions – which sound nonsense today but did not back then – that maybe those who get indebted in forint will be worse off, because if the forint gets stronger, the Forex borrowers will be better off. (S13, Financial Supervisory Authority)

After 2006, however, the official target date for joining the Eurozone was postponed to an unspecified future date, and key economic indicators started to diverge further from the Maastricht criteria. Yet market-wide optimism remained:

If you believe that there is convergence – and you had to be very pessimistic to say that there won't be convergence, in 2007, three years after EU accession – then it explains quite well why people took them out [Forex mortgages]. (S4, senior official at the Central Bank)

As a key mortgage banker (S65) summarized: 'We were lending on hopes'.

Most Forex mortgages, however, were not denominated in euro, but in Swiss franc. Popular reasoning of the time suggested that the franc–euro exchange rate historically showed little volatility, hence it will stay stable in the future (S3, S59, PB, PIC). As the euro historical rates only went back as far as the euro's introduction in 1999, central bankers and banks substituted Deutsche Mark rates for earlier periods (S65). These calculations, following the symbolic cartography of the developmentalist narrative, assumed that Western Europe's regions and countries were relatively interchangeable. As Zsigmond Járai, Central Bank Governor 2001–2007 recalled:

at the time the expectation was that the CHF-HUF exchange rate risk would be present for only a few years and then we will grow into the Eurozone; and after that the CHF-EUR exchange rate risk would be present, which, how can I put it, is *logically* substantially smaller. (PIC 2012)

Assumptions of interchangeability of the euro and franc were disproven as the Swiss franc appreciated due to its 'safe haven' status during the global financial crisis. In fact, the assumption did not fully hold even before the crisis. The franc had been widely used as a carry-trade currency, also in Western Europe. Due to low franc interest rates, traders borrowed in franc to invest in higher-rate currencies. But the Central Bank of Hungary only saw danger in other carry-trade currencies. A 2008/April Stability Report warned of the volatility of 'Japanese yen compared to the Swiss franc and the euro', due to the 'carry trade' and

the lack of 'strong links between the fundamentals of the Japanese and the European economies'. The Swiss franc, in contrast, was not in question due to the supposedly integrated fundamentals of the European Union and the Swiss economy. However, during the global financial crisis, these assumptions turned out to be inaccurate: exchange rates deviated between the euro and the franc, and even more between the franc and the forint.

Foreclosing a crisis from the West. Albeit actors at times lamented a potential forint depreciation, the normative logic of the convergence narrative excluded the possibility that its cause might originate in the West. Political and regulatory discourse pictured the West – which included everybody from Merrill Lynch analysts to 'international investors' and Western governments – as the watchful guardian of the Hungarian economy, responding with immediate punishment and the withdrawal of trust to every wrong move, leading to forint depreciation. 'Wrong moves' that Hungary might make were imagined as a wide range of mistakes: passing a law that is not up to 'European standards', the prime minister making a pessimistic remark about the future or irresponsible budget planning (PD 1997–2007). The other side of this image was a West that rewarded good behaviour, including the provision of financial assistance in case of crisis. A Ministry of Finance employee explained the political thinking of the time: 'We are good boys, we are in a good relationship with everyone. If things go tits-up, Germany will sort it out' (S28).

Consequently, all crisis scenarios started from the assumption that the source of potential problems could only be Hungary's inability to stick to the convergence path due to its own mistakes. This excluded the possibility of a crisis emanating from the mistakes or even actions of Western actors; and even more, a crisis that would hit Western countries so hard that they would struggle to 'sort out' their own economies, let alone Hungary's.

Spatializing the future: racing to development and keeping up with the peers

Convergence formulated as 'catching up' raised additional questions that bore on expectations: is convergence happening at the expected speed and along the right developmental milestones? The metaphor of the East–West slope (Melegh, 2006) does not do justice to the complexity of this orientation exercise. The question was not simply whether Hungary was moving up or sliding down. Rather, as if in an orienteering competition without a map, it probed whether Hungary was on a West-bound pathway or in a dead-end; and whether their speed, *relative* to the others in the catching-up race, was fast enough to keep an elite position.

In search of answers, expectations drew on another realm in the symbolic cartography: the peer 'region'. For Hungary, this was defined originally as the Visegrád Countries of Hungary, Poland, Slovakia and the Czech Republic. The Visegrád Group was formed in 1991 with the aim of 'overcoming the division of Europe imposed after World War II and facilitating the integration of our countries into

the European and Euro-Atlantic structures' (Visegrad Group, 2011). The Group has successfully claimed the lead-pack position in the catching-up race, being seen as the most developed, Western-oriented countries in the former Eastern Bloc. It distinguished itself from the rest of Eastern Europe, which it saw as backward, as the real East. As a high-ranking Central Bank official (S3) put it:

The peer countries were always the Visegrád Four. All the international comparisons you saw always compared the Visegrád Four to each other. This other, um, Eastern stuff or whatever, did not interest us. (S3)

Hungary's convergence speed benchmarked to this specific region was tracked by statistics comparing Hungary to the 'region' both internally and externally, by the OECD and the IMF (see Figure 2). For example, the 2004/June Stability Report stated that although 'the size of the Hungarian banking system shows a substantial lag in comparison to the EU ... it compares favourably within the region' and rejoiced that 'the depth of our country's banking system, measured by household lending, has exceeded the region's average', noting the slowdown of close peers Czech Republic and Slovakia.

Constant comparisons in the developmental race focused on maintaining Hungary's position in this elite league. Slow-down in the growth of

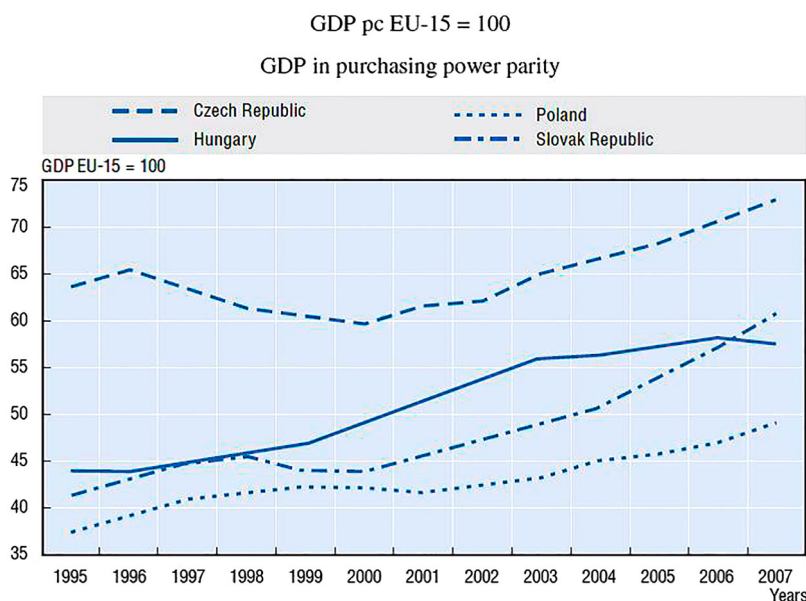


Figure 2 GDP convergence in the European Union

Source: OECD table illustrating Hungary's 'slowdown in the convergence process [to the Western EU members], both in absolute and relative to its neighbouring countries' (OECD, 2008, p. 11).

indebtedness meant lagging within the group – or worse, losing one's elite-league status. This is indeed what happened after the mortgage crisis, when Hungary's GDP growth decelerated: Romania and Bulgaria were added to the reference region. As the same interviewee (S3) noted bitterly, 'And it is not by accident that Romania and Bulgaria came in. And it is just a good pretext that they are EU members now'. The fact that Hungary became grouped with countries that in the symbolic cartography belonged to the despised 'Eastern stuff' was clearly interpreted by this leading central banker as the loss of Hungary's elite status. The term *pretext* indicates that the real reason was that Hungary could not maintain its relative advance.

These comparisons of speed further contributed to locating potential risks in the inability to catch up quickly enough, precluding discussions about how much debt is desirable. Besides becoming a speedometer, the 'region' also guided expectations as to whether Hungary was on the right path, thereby further dispelling doubts about the risks of Forex mortgages. The 'region' was used to judge whether a given phenomenon was an anomaly or just a stage of the convergence process, helping decision-makers clue in to risks. The 2004/December Stability Report compared Forex lending in the 'CEE catching up countries' and concluded reassuringly that 'in terms of the ratio of Forex loans within household loans, Hungary is in the middle range ... the 24 per cent cannot be considered incongruous in a field spreading from 0 to 67 per cent'. Forex lending was identified as a 'characteristic of catching-up countries' (SR 2004/December), since the higher risk premium that corresponded to a country's catching-up status invited the provision of lower-rate loans such as those offered in Swiss franc. Forex lending was seen as a temporary phenomenon, a stage of a journey that other converging countries were also passing through on their way to Europe.

Finally, the 'region' allowed for dispelling doubts when certain indicators showed a persistent 'lag'. One of these were house prices, which were essential for expectations regarding the future value of real-estate collateral. As a risk analyst (S54) recalls, 'real-estate prices were one of our most important statistics. We were gauging them because the price, the real-estate price index, is an important factor'. Local real-estate prices, however, showed a decline in real terms (FHB, quoted in MNB, 2011). In interpreting these data, analysts relied on real-estate price trends in the peer region, where prices showed an ascending trend. Hence, analysts concluded that Hungary has not reached the growth stage *yet*, using peer performance as a proxy for Hungary's short-term future. This allowed for the formation of expectations of an imminent upward trend, based on data showing a downward trend (S54).

Dilemmas of spatial pathways

In the previous section, we showed how spatialized expectations, imagined and measured as movement through a symbolic space towards an idealized Europe,

along reference points marked by peers, foreclosed the scenario of the crisis to come. In this section, we show why we consider this space ‘symbolic’ despite its evident reference to real locations, economic geographical characteristics and to the EU convergence process. As we explained above, the convergence process did not specify targets for mortgage debt levels, and defining the ‘EU level’ was complicated by the fact that mortgage-to-GDP ratios widely differed across the EU countries (Schwartz & Seabrooke, 2008). This means that the future of the mortgage market could not be deduced from actual and planned convergence steps in any straightforward way. Rather, actors laboured to identify and effectively construct endpoints and trajectories, by selectively drawing on the data available and creating linkages from that data to the future.

We illustrate this process by showing the diversity of trajectories in use: some leading first through the Southern European countries to a more advanced Western core; others leading through the more recently joined to the oldest member states; yet others through the small EU countries; or envisaging a straight line along which Hungary was to move towards the EU average. We will suggest that although the logic of constructing the pathways referenced the actual convergence process, it often invoked the developmentalist Westernization narrative. Rather than setting concrete targets, pathways customarily used a fluid notion of Europe extending beyond the European Union and mobilized the logic of the GDP-based developmental path, even though mortgage debt did not follow differences in GDP.

Uncertain endpoints and trajectories

Not having been handed clear-cut future scenarios of convergence, it is not an exaggeration to say that participants in the Hungarian mortgage market were looking around for the future. They charted a variety of pathways along countries chosen by diverse selection logics. One possible trajectory led through the path of Southern European countries, then eventually to Western European ones (see [Figure 3](#)).

As a banker explained, when assessing Hungary’s debt levels to define short-term benchmarks, investors looked at mortgage lending indicators of

Central-Western European economies ... those of other countries that we can use as an analogy, like Portugal, Spain. So, I don’t mean the most advanced ones like the Anglo-Saxon countries, the Netherlands or Sweden; but the ones that were two steps ahead of us, which we usually used as reference points or benchmarks for Hungary and the Eastern markets. (S53)

The term *Central-Western* invokes an imaginary cartography, in which these countries are not in Southern Europe, but in-between Hungary and the real West, on Hungary’s westward path. Given that the topic is mortgage debt,

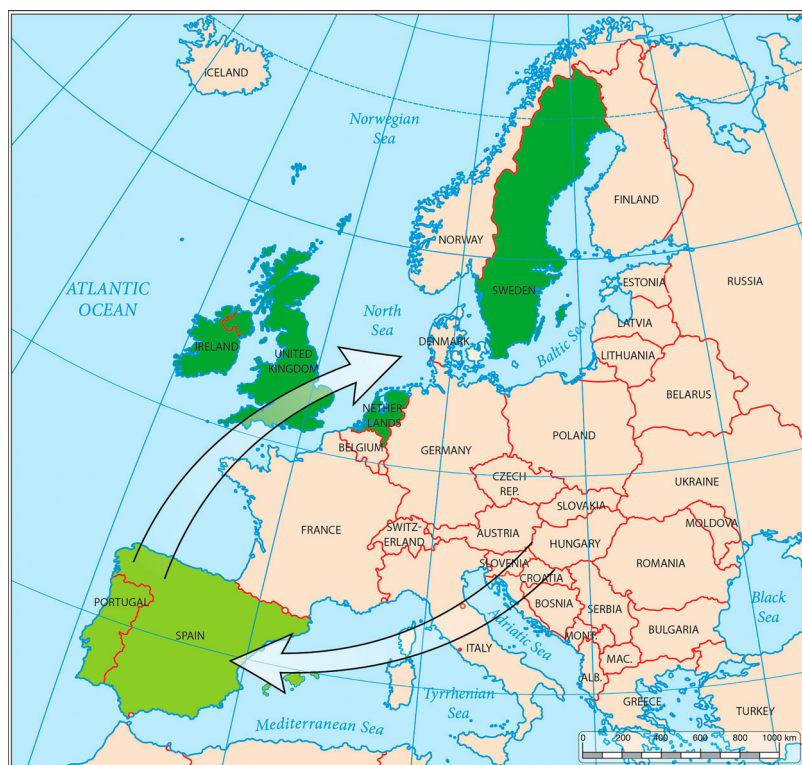


Figure 3 The Southern pathway

we would expect that they are in-between in terms of mortgage levels, situated between countries with low mortgage levels (Hungary) and countries with high levels (the United Kingdom, the Netherlands and Sweden). Yet, it is not the case. In the early 2000s, the period to which the quote refers, mortgage levels did not follow a North–South division. While Italy and Greece had some of the lowest mortgage-to-GDP ratios (11.5 per cent and 15.5 per cent to GDP), Spain (40 per cent) and especially Portugal (46.3 per cent) had relatively high ratios, higher than Ireland (42.3 per cent), France (24.3 per cent), Belgium (29.5 per cent), Austria (17.7 per cent) and Finland (24.8 per cent), in fact more similar to Germany (53.5 per cent), Sweden (52.5 per cent) and Norway (52 per cent) (European Mortgage Federation, 2003, p. 89; see Figure 4). The cartography referenced by the interviewee thus selectively rearranged countries, moving Spain and Portugal into the low-mortgage-ratio group. This suggests that its underlying logic was ranking by GDP (see Figure 5). In light of the fact that GDP levels did not correlate with mortgage debt, the use of GDP-ranking suggests that the conventional, developmentalist narrative informed this trajectory.

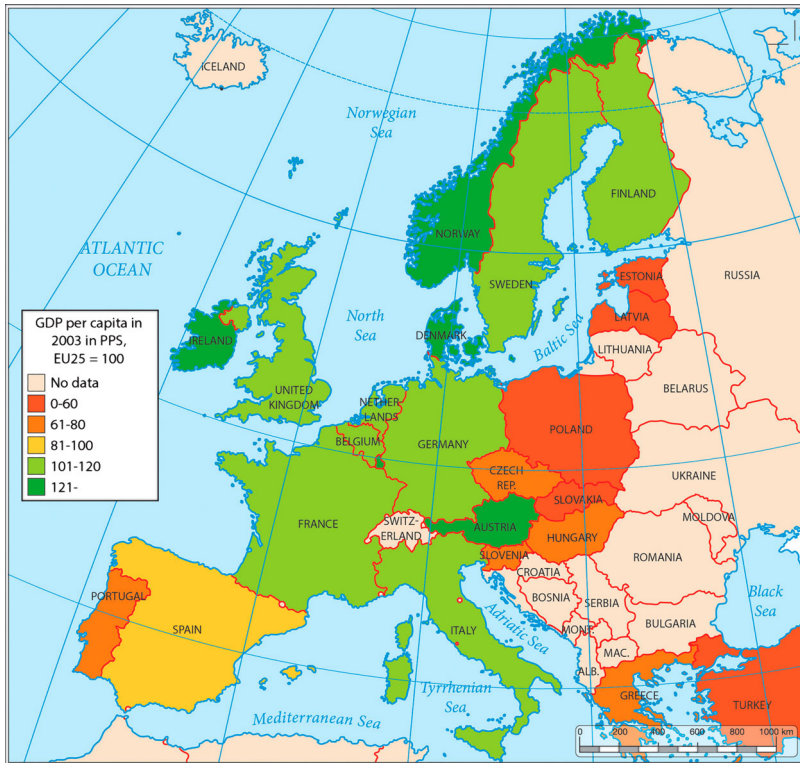


Figure 5 GDP-per-capita in 2003 in PPS, EU25 = 100

Source: Based on data from Eurostat (2004).

June and December), ‘countries of developed market economy’ (SR, 2000/ August)’ or plainly as ‘Western Europe’ (SR, 2004/June), used as synonyms in the same text. Western European but non-EU countries, such as Norway, were often included when charting a potential convergence trajectory, and all EU-15 countries were customarily referred to as ‘the Eurozone’, even though Denmark, Sweden and the United Kingdom are not members (e.g. SR, 2004/June). Economists at the Central Bank and other market actors were aware that not all Western European countries are EU members and not all EU-15 countries are in the Eurozone. Yet, these distinctions seemed to be unimportant details in forming their expectations, because they all referenced the same entity of the developed Europe.

What exactly would the destination defined more closely as the ‘European Union’ look like? This was also unclear: some reports used the EU average of the chosen metric; others the ‘typical’ EU indicators; yet others suggested that all Western European countries carried the essence of the European Union. This is reflected in the strategy, used particularly by legislators, of referring to the example of *a* Western country such as the United Kingdom,



Figure 6 Moving towards ‘Europe’

Denmark or Germany, when arguing for a particular direction Hungary’s future should take (PD 1997–2007). Customarily, there was no reason given as to the choice of that country; it served to reference the larger idea of the ‘West’ and thereby confer legitimacy on one’s argument. As European countries are diverse, it was convenient to find a Western example of any political proposition and its opposite.

The diversity of pathways highlights the interpretative element in constructing trajectories, by drawing selectively on the actual and desired convergence process. This interpretative openness allowed for sharing the convergence narrative across different actors and expectation practices. By being able to accommodate a variety of pathways, the convergence narrative became a ‘boundary object’ (Star & Griesemer, 1989), lending itself to radically different interpretations and contexts. Despite their differences, ambiguities and inconsistencies, however, these trajectories were not as different as to be contradictory. They all referenced, in one way or another, a westward movement.

Ambivalence played an important role in dismissing information that questioned the development process. Over time, the different indicators

used for monitoring the state of ‘catching up’ showed an increasingly mixed picture. While debt-to-GDP ratios were still below the Western level, households’ debt-to-income ratios exceeded it. As a central banker remembers:

Financial deepening refers to a standpoint that, to some extent, it is normal for the population to become indebted. If you look at half of the Eurozone, you see that household debt is at 60–70 per cent of the GDP. If you look at Hungary, you can see that it is still at 30 per cent. ... At the CBH when we analysed household debt specifically, we said ok, if we look at debt/GDP ratios there is great Hungarian lag. But if we look at household indebtedness, there is no lag. (S4)

This became a topic of internal discussions in the CBH, revolving around the correct interpretation of data (S3, S4): as laudable catching up or as overshooting the target and resulting in over-indebtedness. Even the 2008/April Stability Report stated that although ‘the 28 per cent of Hungarian household debt-to-GDP ratio is still substantially lagging behind the 55 per cent characteristic of the Eurozone ... the 33 per cent financial liabilities-to-financial wealth ratio is already above the 27 per cent reference level’ and the ‘13 per cent repayment-to-income burden of the household sector ... is higher than the 10–11 per cent of the Eurozone’.

The report resolved the problem by pointing out that ‘beside the average value, large differences exist among the member states, hence there are countries where the repayment-to-income burden is twice as high as in Hungary’ (SR, 2008/April). Switching to a different yet compatible interpretation of the European Union, marked not by the EU-average, but by particular EU countries, allowed for smoothing the inconsistency without undermining the convergence narrative. In this way, the indeterminacy of the convergence pathway made it possible to sustain the narrative by flexibly adjusting what was meant by the ‘European Union’ and by re-routing trajectories to fit the convergence ideal.

Conclusion

Starting from a reflection that existing accounts focusing on ‘knowledge failures’ to foresee the financial crisis are not adequate to understand the broader set of ‘simpler crises’, this paper looked at the formation of expectations in the Hungarian Forex mortgage market prior to its crisis, between 2002 and 2008. By focusing on Eastern Europe, we have begun to unpack the varied ways in which countries outside the Western core jumped on the optimistic bandwagon. Based on these findings, we propose the concept of *spatializing the future* as a means of legitimizing, stabilizing and sharing expectations across actors. We detail these contributions below.

Knowledge failures in the semi-periphery

Our analysis highlighted the central role of the EU convergence narrative in why key institutional actors did not seriously consider scenarios of a Hungarian mortgage crisis, which eventually materialized. As in all narratives, it allowed for envisioning certain crisis scenarios while precluding others. First, the convergence narrative depicted growing indebtedness as a sign of the desirable catching-up process in relation to Europe. The preoccupation with the problem of how to grow until Hungary reaches EU mortgage levels led banks and their regulators to welcome Swiss franc mortgages and concentrate on their beneficial effect of closing the debt gap, attending less to the risks of rising household indebtedness and of potential exchange rate changes. Secondly, the narrative dispelled concerns that the Hungarian currency would be drastically devalued relative to the Swiss franc, through the expectation of Hungary's convergence to the economic fundamentals of a homogeneous Europe. Finally, it foreclosed crisis scenarios originating in the same, superior Europe.

The convergence narrative, imbued with orientalizing notions of inferiority and progress, disregarded the possibility of economic diversity as well as of *mutual* convergence. Although the term convergence means 'to come together', actors did not entertain the idea that the European Union could be an amalgam of old and new countries, even after Hungary's entry into the Union in 2004. Rather, reflecting the Westernization imaginary, convergence was understood as a one-sided catching up to the standards set by the old member states, even in cases where an argument could be made in favour of 'lower' standards, e.g. in levels of indebtedness.

The convergence narrative, we argued, albeit referencing the concrete EU and Eurozone convergence process, cannot be reduced to a simple acknowledgment of the objective reality of this process. The convergence process was uncertain not only in the sense of *when* an otherwise fixed set of events would happen, but also in what exactly *would* and *should* happen. Facts of the actual convergence process were insufficient to form expectations, partly because the process did not involve targets for the mortgage market, and partly because existing EU countries showed large institutional variety and varied indebtedness levels.

Our paper showed how this uncertainty was resolved, at least partly, by fusing the convergence narrative with the older developmentalist narrative. The latter filled in the gaps left by the uncertainties of the convergence process and allowed for trajectories to be drawn into an otherwise uncertain future. Importantly, it acted as a powerful legitimizing and doubt-repelling force (Chong & Tuckett, 2015) by linking convergence to the long-coveted membership in the West.

Spatializing the future

Returning to the question of how expectations are formed and maintained in the economy, our study not only confirms the centrality of narratives in this process

(Beckert, 2013b, 2016; Czarniawska, 1997; Esposito, 2011; Mützel, 2013), but also identifies the spatial dimension of working out the future. The *spatialization of the future* is a practice of forming expectations that translates temporal change (typically growth) into spatial movement, depicting future events as positions along a trajectory – in certain cases, leading through and towards concrete geographical locations. These practices ‘defuturize’ in Luhmann’s sense by transposing the problem of time into a problem of space – of distance, speed and being on track.

In our case from Eastern Europe, expectations were stabilized by a European convergence narrative which was embedded in a cartography, through which a spatial trajectory could be charted from Hungary to an idealized destination, the European Union. This cartography was populated with Western European destinations and milestones along the path, as well as with countries in Hungary’s peer region whose position helped to establish whether Hungary was on the right track and moving at the right speed. Albeit referencing real geographical places, the manner in which these places were selected and causally linked into a trajectory of Hungary’s future was deeply interpretative. Actors charted diverse pathways by drawing selectively on the actual and presumed economic facts of convergence. This selection was often informed by the developmentalist cartography. In this sense, it was a symbolic space, akin to Said’s (1980) ‘imagined geographies’ (p. 49).

Spatializing techniques provide additional insight into how certain future scenarios are legitimized and maintained despite counter-evidence. Emotions (Chong & Tuckett, 2015), self-representations (Boccaro, 2014), institutional frames and interests (Abolafia, 2010; Davies & McGoe, 2012) undoubtedly play a role in maintaining particular narratives of the future – and did in our case, too. Indeed, the convergence narrative came to dominate and withstand counter-evidence, in great part because Europe had been a ‘phantastic object’ (Chong & Tuckett, 2015; Tuckett *et al.*, 2014). As such, it tapped into Hungary’s idealized self-representation (Boccaro, 2014) as a Westernizing nation – as well as coinciding with actors’ specific interests: profitability for banks and political gains for policymakers.

Yet, spatializing practices have an additional aspect that allows them to maintain and disperse expectations over time, which is not captured by these explanations: their seeming matter-of-factness. They translate abstract concepts into a spatial movement, something externally projected, trackable and verifiable – most notably in geographical space. This transforms uncertain futures into seemingly certain pathways by granting them a natural, taken-for-granted, even reified character.

Spatializing practices also help us understand how particular expectations come to be shared across diverse institutional actors. This sharing, leading to ‘regulatory monocultures’ (Bronk & Jacoby, 2016) or ‘epistemic communities’ (Engelen *et al.*, 2012), has been seen as central to many prediction failures. While seemingly concrete, spatialized futures facilitate sharing if they remain underspecified and ambiguous. Referencing a specific direction, rather than a

single trajectory, allows them to act as a 'boundary object' (Star & Griesemer, 1989) that can be adjusted to actors' different existing expectation practices, as in Hungary's case. The underspecified westward movement to Europe provided a shared reference point across key actors, from the vague Western ideals alluded to in Parliament, to the meticulous statistical scenarios of the Central Bank and to banks' benchmarks, allowing for a relatively shared expectation of a prosperous future path (see also Vargha, 2010). While actors used different forms of predictions, choosing what parameters and data to include, and evaluating the calculated results, relied on a shared spatial narrative.

We can extend these insights on geographical spatializing expectation practices beyond the financial crisis. Geographers and sociologists of finance show that new geography-based investment categories such as 'emerging markets' (O'Tuathail, 1997; Sidaway & Pryke, 2000), 'Asian emerging markets' (Lai, 2006) or 'BRICS' (Brazil, Russia, India, China and South Africa) (Wansleben, 2013) are not objective givens but created discursively by the 're-scripting of global spaces' through 'geographically imagined and socially constructed processes' (Sidaway & Pryke, 2000, p. 197; see also Lee, 2003). Examining these processes through the lens of expectation-formation, we can identify a similar spatialized practice at play: countries are grouped into 'regions' based on shared *prospects*, whether promising (BRICs) or gloomy (of the 'PIGS' of Portugal, Ireland, Greece and Spain). It is the anchoring in concrete geography that makes these prospects stable and credible.

Yet, our arguments on spatializing expectation practices apply beyond the geographical understanding of space. Trajectory can be charted through a mathematical space of laying out expected values over time in a graph, such as that of stock performance (Preda, 2007) or treasury bond yields (Zaloom, 2009). Similarly, studies of accounting change, technological innovation and strategic planning have highlighted actors' efforts to rely on spatial metaphors that can summon a path, if not a destination, on which innovation or strategy will lead actors, most notably the 'road map'. These may convene a new market around themselves (Miller & Leary, 2007; Sydow *et al.*, 2012) or lead an organization from the present through steps towards reaching the strategic objective (Ezzamel *et al.*, 2004; Jarzabkowski & Kaplan, 2015). For strategic planning, the imaginary space is filled with competitors to distinguish from and surpass. Such a competitive space might be constructed by third parties, such as market research firms or investment analysts, which create ranking dimensions to position and perform the evolving or novel 'market' (Pollock & D'Adderio, 2012).

Spatializing the future is one of many possible ways in which expectation narratives are legitimized (see Beckert, 2016). This raises a further direction for research: to understand why spatial narratives are more relevant in some settings than in others. Why, for instance, is spatializing the future a much more salient practice in the semi-peripheral region than in the core Western countries? Indeed, spatial aspects may inform expectations more generally, depending on actors' 'location'. While from the vantage point of countries designated as non-Western, emerging or developing, expectations would be explicitly

formulated as progression through space, from the viewpoint of countries considered as core, such spatialization might be present as the assumption of taken-for-granted, central positions – this is suggested by the relative absence of space in these markets' narratives. If previous studies were right in focusing predominantly on temporal aspects of expectations, we may now ask why there would be a *lack* of spatializing the future in certain settings, and with what consequences. The absence of space and awareness of one's own position may indeed be a key element of the scenarios these de-spatialized narratives allow for.

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Notes

1 Calculation for a typical Swiss franc (CHF) mortgage (10 million HUF, 20-year maturity, acquired between 2005 and 2008), using Central Bank of Hungary (CBH) statistics on average interest rates and monthly average exchange rates to estimate changes in monthly instalments.

2 This scenario did not apply equally to all Eastern European countries, due to differences in the level of household debt and the proportion of Forex mortgages within it, exchange rate policy (e.g. floating versus fixed) and policy responses to the crisis. The countries that were hit hardest were Hungary, Poland, the Baltic States, Bulgaria, Romania and Ukraine, while Slovenia, Slovakia and the Czech Republic experienced fewer problems (Bohle, 2014; Dübel & Walley, 2010; Marer, 2010; PFS Advisory Team, 2012; Yeşin, 2013).

3 For a related discussion on decision-making under conditions of uncertainty see Gigerenzer (2016) and Savage (1972).

- 4 Expectations about the future behaviour of 'the market' have been studied as part of collective practices of knowledge-production, performed through specific technologies (e.g. the notion of a 'scoping system' and 'flow market' (Knorr Cetina & Preda, 2007). In this literature, however, imagining the future was not theorized as a core form of market action.
- 5 Economists agree, but see it as a temporary feature (see, for example, Banai *et al.*, 2011).
- 6 For a discussion of how these relate to the social construction of geographical investment regions, see our Conclusion.
- 7 For an analysis of power struggles across actors see Pellandini-Simányi *et al.* (2015).
- 8 Squared brackets are our additions; round brackets are alternative translations. Italics are added emphasis.
- 9 As noted above, we do not claim that the convergence narrative was the only reason why the CBH did not intervene. Financial stability, guarded by the CBH, could be equally threatened by an economic slowdown as by a credit boom. House-building was a significant part of GDP growth; hence, the question became whether risky borrowing or slow GDP growth was more dangerous. Between 2006 and 2010, slackening GDP growth appeared to be the bigger danger to convergence than the possibility of a mortgage crisis. This and other explanations are not discussed in the paper because our aim is to analyse the role of the convergence narrative in downplaying the crisis scenario, rather than a full review of expectations.

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