

Anikó Bódi-Schubert: Factors behind high cash usage in Hungary*

This article summarises the findings of qualitative, in-depth interviews which aimed to explore the motivating factors behind domestic cash usage that generate the significantly higher cash volumes in Hungary than would 'normally' be justified. In the opinion of the experts interviewed, cash usage may be facilitated by the intensive cash need of the hidden economy, the traditional cash-oriented behaviour of the public administration and a lack of trust in business-to-business transactions. This analysis primarily intends to capture certain trends, which may have temporarily changed in the wake of the economic crisis, but nevertheless span a number of years and the specific phenomena of which may be regarded as generally valid over the long term, apart from certain periodic effects.

INTRODUCTION – MOTIVATION AND METHODOLOGY OF THE RESEARCH

Considering their domestic and international implications, the non-observed economy and tax evasion are significant, comprehensive problems made up of several dimensions, the correlations and treatment of which are being analysed by experts and researchers in a number of studies and analyses. The research series initiated by the MNB for the purpose of examining the reasons behind the cash usage linked to *external*, i.e. 'informal' transactions¹ also relates to this topic. This article can be regarded as one of the partial results of this series of research works based on qualitative studies. Its objective is to explore possible explanations for the magnitude of the domestic cash volume, which is extremely high in an international comparison, and to identify the underlying factors behind this significant cash usage. On the one hand, the article focuses on 'a specific slice' of the non-observed economy – i.e. transactions related to cash movement – and as such, it does not examine factors such as the regulation of the non-observed economy or tax evasion unrelated to cash. Although in some parts of the article we evaluate the changes observed in the dynamics of cash usage over the past few years, the paper is primarily intended to analyse a number of trends, which can potentially explain the exceptionally high cash volume. On the other hand, in addition to the informal economy, the article takes account of other reasons for the high cash volume as well, such as a lack of trust in business-to-

business (hereinafter B2B) transactions and the cash-oriented nature of the public administration's operation. Following this, we present the results of the *qualitative interviews*, during which we intended to rely on the professional experience of sectoral experts and researchers in order to explore those elements of the Hungarian economic processes – in particular, the role of the non-observed economy – which could account for such a high level of cash usage. We consider this research direction relevant because the motivating factors of the non-observed economy's cash demand and their correlations are not easy to analyse through qualitative methods.

In the course of the qualitative research we primarily performed secondary analyses, i.e. rather than questioning firms directly we conducted interviews with representatives of the expert authorities including a total of 12 advisors, sectoral experts and researchers. In the interviews we attempted to cover the largest scope possible, thus, in addition to interviewing the Tax and Financial Control Administration (APEH) and the Police, we contacted experts and researchers with several years/decades of experience and expertise about the operations of a number of highly affected sectors such as retail sales, public procurement, transportation, financial consulting and the construction industry. In addition to the sectoral experts, we also consulted economic statistics analysts, as well as social and economic researchers on the subject of the informal economy.

* The views expressed in this article are those of the author(s) and do not necessarily reflect the official view of the Magyar Nemzeti Bank.

¹ In accordance with the OECD's recommendation, economic statisticians refer to the portion of production or services on which data cannot be collected or are not collected as the non-observed economy (NOE). This concept, inter alia, includes illegal activities (primarily for tax fraud purposes), as well as legal but unreported activities, or legal but 'under-reported' activities. In this study, for the sake of simplicity, the concepts of informal economy, hidden economy or black and grey economy are treated as synonyms.

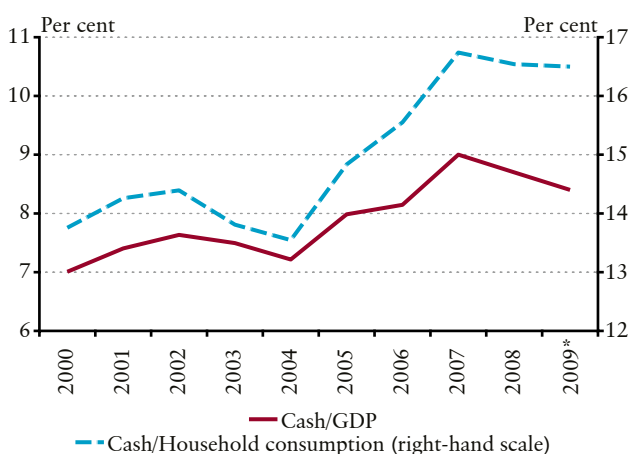
Our review of certain forms of tax avoidance shows the ways in which they are directly connected to cash usage, for example, through grey wages and illegal purchases. Indeed, primarily owing to its anonymity, cash may contribute to the operation of the non-observed economy in certain cases. In the case of certain transactions – which are mainly related to concealing income – cash may support and simplify their actual execution, even though the cash ‘involved’ in the transactions does not necessarily derive from sources related to the non-observed economy.²

KEY MACRO-ECONOMIC INDICATORS OF DOMESTIC CASH USAGE – SHORT OVERVIEW

The ratio of the domestic cash volume to GDP in Hungary is considered to be significantly high in comparison with not only compared to ‘well developed’ Western European countries, but also to ones which are at the same level of development as Hungary.³ The values of cash volume expressed as a proportion of GDP and household consumption are illustrated in Chart 1. After the significant decline in cash demand observed in the second half of the 1990s, the domestic GDP/cash ratio tended to stagnate in the early 2000s. In 2004, this trend reversed and the cash volume started to increase sharply, despite not being justified by the economic fundamentals. Between 2008 and 2009 the value stagnated again.

Chart 1

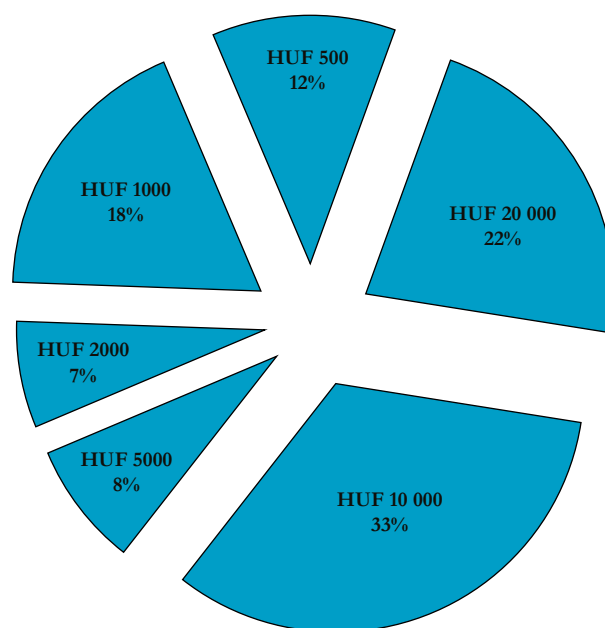
Values of domestic cash volume as a proportion of GDP and household consumption expenditures between 2000 and 2009



Source: MNB.

Chart 2

Share of certain denominations in the total banknote volume, in percentages



Source: MNB.

Although the Hungarian cash/GDP ratio reaches an extreme level and is questionable in itself, the significant and continuously increasing share of *large denominations* (10,000 and 20,000 forint banknotes) in the overall cash volume generates further problems. Chart 2 presents the share of specific denominations in the overall banknote volume. As the chart clearly illustrates, large denominations together amount to approximately 55% of the total domestic cash volume.

We can also draw conclusions on the role of specific banknote denominations in cash circulation from two additional correlating indicators: the turnover rate and the unfit rate. The turnover rate shows the reflow of an ‘average’ banknote to the central bank during one year. A high value for this indicator suggests that a banknote is used more frequently and plays a more intensive transactional role. The value of turnover indicators for domestic banknote denominations is between 1 and 1.2 on average, but large denominations, especially the 20,000 forint note, behave differently. The turnover rate of the largest denomination is only between 0.5-0.6, indicative of a rather moderate transactional role. The unfit rate expresses each denomination’s share – as detected as unfit

² For example, if a retailer gives its cash-paying customer a receipt unrecorded in its ERP system and/or does not issue an invoice, the income generated by the transaction may be suitable for use in illegal transactions, such as grey wage payment or purchases without invoice.

³ See Odorán and Sisak (2008).

for use⁴ – compared to the overall denomination volume. The 10,000 and 20,000 forint notes behave differently from the average also in respect of this indicator. Compared to the average unfit rate around 30%, of the 20,000 and 10,000 forint notes received by the central bank less than 5% and around 14% must be ‘replaced for new ones’ on the grounds of poor quality on an annual basis, respectively. The values of this indicator clearly confirm that economic participants use large denominations in general and the 20,000 forint notes in particular, as tools for the accumulation of wealth, in which not only legal transactions, but the non-observed economy may also play a role.

HIGH CASH USAGE GENERATING FACTORS IN HUNGARY

In this chapter, we summarise the main conclusions of the qualitative interviews. We present the factors, which – in the opinion of the experts interviewed – may explain the exceptionally high level of domestic cash usage. In the interviews, we identified *three dominant motives stimulating cash demand*, which may help to explain the intensive cash usage of economic participants. The potential factors behind this cash usage are the following: *the non-observed economy, the traditionally cash-oriented behaviour of public administration and a lack of trust in B2B transactions*. Presumably, there are additional underlying problems behind these factors, such as a lack of electronic intra-day payment options, underdevelopment of the domestic POS network and tax avoidance emerging as a reaction to the significant tax burdens. In the next part of the article, we use the above classification to review the effect of each factor on domestic cash usage.

Cash demand of the non-observed economy

Based on the experience of the experts interviewed in our research, the non-observed economy undoubtedly uses certain clearly identifiable transactions, which must be, nearly always, settled in cash. Obviously, this does not mean that tax evasion or the performance of other informal

operations can only take place in cash; in this chapter, we merely provide a summary of those transactions related to the grey and black economy, the emergence and spread of which may boost cash usage in Hungary. The fraudulent transactions listed below are typically based on the following mechanism: for the affected firm the concealment of sales revenues and income is crucial for tax evasion. They achieve this either through uninvoiced cash sales or ‘over-booked costs’.⁵ The firm then uses this concealed, hidden income for new informal transactions, typically to cover the most expensive cost component in terms of tax and contribution burdens: i.e. it pays employees ‘off the books’ or executes additional, potentially illegal purchases.

Grey and black employment

Based on the experience of most experts interviewed, as it relates to employment, fully illegal black work has declined in the past 4-5 years, and has been limited to a few typical sectors.⁶ At the same time, the common use of *semi-legal employment (for low reported wage of around the minimum wage level plus cash)*⁷ – which is largely irrespective of specific sectors – is extremely damaging for the national economy as well as for overall social interests. According to the experts interviewed, this type of ‘remuneration form’ is found in nearly every sector from financial consultants through freight companies to retailers, as it is the size of the company, rather than the sector, which determines employment in general.

Large companies typically cannot afford to/will not use such illegal methods, because on the one hand, they are easier to control, and on the other hand, a potential loss of reputation would have an impact on their operations. However, according to the experts interviewed, small and medium-sized companies frequently resort to this solution. In the context of grey wages, another problematic phenomenon is the fact that some of the firms using this form of remuneration are in fact not real economic associations, but rather self-employed or joint venture businesses hiding behind limited liability. Moreover, as is often the case, even employment relationships may hide behind limited liability companies by means of ‘sub-contracting’.

⁴ The central bank and the market-based cash logistics service providers check the authenticity of every banknote they receive, and they also check whether the specific banknote can be classified as marketable and ‘in good condition’. They also make certain that the banknote is not torn, chipped or stained, and that all of its security features can be clearly identified. The central bank destroys all unmarketable banknotes of poor quality. The market selection criteria of banknotes are set out in regulation No. 2/2009 (I. 23.) of the MNB.

⁵ By recording a disproportionately high cost volume, see Section 2.1.3.

⁶ Agriculture, construction industry, tourism-catering.

⁷ Although the statistics of the Tax and Financial Control Administration suggest that the number of people employed at the minimum wage has declined continuously over past years, this form of grey employment continues to be typical. The only change is that employees or the entrepreneurs themselves are now ‘reported’ as earning an amount somewhat higher than the minimum wage, while they continue to receive the remainder of their income in cash. Another ‘solution’ is legal, part-time employment. Undoubtedly, the employee in fact works full time, nevertheless, he and the employer pay only a half of the taxes and contributions, while the employee receives the illegal, grey part of his wage in cash ‘off the books’. Source: Elek, Scharle, Szabó, B. and Szabó, P. A. (2009).

According to the general experience of the experts interviewed, this form of employment and income generation has evolved in many cases as an inescapable path in the practice of firms. Indeed, over the short term it is more beneficial both for the employer and the employee 'to be left with more money in their pockets' rather than having to bear the substantial tax and contribution burdens. However, over the long run, this scheme is clearly disadvantageous for employees, as in the case of permanent sick leave and/or retirement they will receive extremely small amounts of benefits, and they might even lose their entitlement to state pension completely, thus 'this type of remuneration is a big step toward old age misery'.

Failure to issue an invoice or issue an invoice for a lower value

In the opinion of the experts interviewed, *services are often sold without an invoice or with an invoice issued for an amount lower than the actual value* in the 'appropriated sectors' mentioned above, as well as in wholesale and retail trade. The main objective of uninvoiced sales for firms is to optimise tax payments for their own benefit. Indeed, by hiding their income, they can significantly reduce their tax burden relative to the legal level.⁸ This type of corporate behaviour may be closely related to the emergence of VAT fraud as well; indeed, as no VAT is paid on illegally obtained income, the enterprise's tax burden may be reduced further.⁹

Based on the findings of the interviews, *the strong correlation between non-issuing invoice and the black/grey-wage problem presented in the first point* has a spillover effect. In many cases, firms simply raise the money required for the 'real' wages paid to the employees in excess of the black and/or low reported (minimum) wages through uninvoiced sales, or by issuing an invoice for an amount lower than the actual counter-value, which is difficult for the authorities to verify. Obviously, in these cases the client pays for the actual value of the good or the service in cash, and the firm uses the cash received to finance its own operations or other transactions as well (such as, in addition to wage payment, illegal purchases, illegal capital income or dividend payment of the owners, etc.).

Invoicing related to fictitious performance

The other form of reducing booked income – the opposite of the 'phenomenon' presented in the previous point – is *when firms accept fictitious invoices¹⁰ and subsequently book significantly higher expenses than they actually incur in connection with their operations*. While these actions have been practically continuously present in the operations of the economy since the political transition, their weight has increased significantly over the past few years. The damage generated by these types of cases as measured by those solved by the police amounted to around HUF 110 billion¹¹ in 2008, but the authorities are convinced that only a limited share of the actual cases has been identified or provides sufficient information to initiate a police investigation.

In addition to 'tax optimisation',¹² which is one of the reasons for fictitious invoicing, *participants often conceal up to 10-15 percent of the total value of a project/investment by issuing fictitious invoices for unperformed work*.¹³ The method is relatively simple: a front man typically establishes a one-person enterprise and issues a high-value invoice for the performance of a difficult-to-verify activity – such as consulting, cleaning, translation. The client (typically the project manager general contractor) accepts the invoice and transfers its amount to the party issuing the invoice. Next, the front man withdraws the money credited to his bank account and hands over the cash to the persons 'hidden in the background' – in many cases the general contractor might also be involved in the fraud. The front man issuing the invoice will only keep a fraction of the original amount as 'the counter-value for his cooperation'.

As it relates to payments for fictitious performances, another reason for concern is a provision of the Act on Public Procurement (Kbt.), according to which public institutions may order *consulting services, research or professional publications*¹⁴ in an amount of up to HUF 50 million *without initiating a public procurement procedure*. According to the experts interviewed, this provision may create an opportunity for fraud in certain cases, and when this opportunity is exploited, the state budget may suffer

⁸ In the opinion of some of the experts interviewed, the VAT increase effective from July 2009 may further increase the number of uninvoiced sales, as in these cases consumers do not perceive the price-increasing impact of the VAT increase, while the vendor may obtain a short-term competitive advantage over its legally operating competitors.

⁹ P. Kiss and Krekó (2007).

¹⁰ Formally legal invoice without any real business performance behind.

¹¹ Source: ORFK.

¹² By the 'over-deduction' of the company's expenses, they reduce pre-tax profits and hence the company's tax base, which, in effect, translates into tax evasion once again.

¹³ It should be noted that this activity involves significantly higher risks than concealing revenues. Not only is it more likely to be discovered, but the degree of criminal liability is also higher.

¹⁴ Section 243 (a) and (i) of Kbt, value limit EUR 206,000 (around HUF 53 million) and Section 22 (1) a) of the Kbt, value limit EUR 133,000 (around HUF 35 million).

damages as a result of the following process: the public office orders a research or different consulting services – the performance of which is in fact certified – nevertheless, the relevance and the professionalism of the document received as the output of the service may be questionable. As a payment, the office ordering the service transfers the service fee to a – maliciously – cooperating enterprise, thus the transaction appears legal. The cooperating parties can now withdraw the consulting/service fee in cash – not necessarily the entire amount; they may take several instalments – and the ‘players’ participating in the transaction may share the cash. A number of the experts interviewed indicated that the exercise described above may, in certain cases, ensure uncontrolled access to public funds for malicious clients.¹⁵

Recent upsurge in (individual) investment opportunities generating substantial profit and changes in the tax regulations pertaining to petty cash

The broad-based surge in *individual (owner and/or management) investments for tax avoidance purposes* has presumably exerted the greatest impact on the cash usage of businesses in recent years. Changes in the *taxation of petty cash* is a part of this process, as the two factors listed above exerted their impact simultaneously and mutually influenced one another. As the yields on corporate investments are subject to corporate tax – moreover, in order to access the resulting profit the owner is required to pay dividend tax, as well – a number of owners (occasionally managers) ‘could not resist the temptation’ to ‘get money out of the company’ by recording a portion of the company’s wealth as petty cash, thereby avoiding several tax payment liabilities. Circumventing the difference between the corporate tax law and the personal income tax law, they proceeded to invest these amounts as private individuals, and realised substantial profits through tax avoidance. Experts assume that a substantial part of shareholders’ credits may have supported other frauds committed for similar purposes by using similar methods.

In most cases, the participants concerned failed to reinvest these profits in the company, and their books continued to show these funds as petty cash, while in fact they were used to increase the private wealth of the owner (occasionally the manager). As the original amount of money had to be taken out of the company in cash, these operations must have also contributed to the increase in the cash volume, given that

they involved a multitude of very high-value transactions (amounting up to tens or even hundreds of millions of forints in each business involved).

According to the experts interviewed, the tax regulations pertaining to petty cash may have played a role in changes in the cash volume as well. We present the sequence of the events shaping this process below. Based on what we heard during the interviews, the ‘cash leaked out’ through petty cash was a ‘well-established and continuously used tool’, which not only boosted the owners’ private wealth but was also used to pay the wages of employees on grey salary schemes and to execute illegal or partly legal purchases. These transactions were somewhat constrained by the tax levied on cash on hand in 2006, at which point many businesses started to reduce the cash on hand recorded in their books and leak back the amounts – or a part of the amounts – taken out up to then. These transactions were also executed in cash.¹⁶ However, once policy makers eased the initial regulation, some firms ‘relaxed and, continued the practice of withdrawing cash’. When the taxation on petty cash adopted in 2009 introduced tighter conditions once again, the missing funds slowly started to find their way back into the companies, and the ‘room for these kinds of tricks’ was substantially restricted. This phenomenon moderated ‘naturally’ as well, and it has partially phased out by the second half of 2008 in the wake of the crisis. These operations, which flourished in 2004–2006, may have left their traces in the accounting records of companies. It is important to note, that the replenishment of amounts taken out of companies through petty cash or shareholders’ credits is carried out with less intensity than their withdrawal, as the owners/managers deposited these funds not only in short-term investments. It is also possible that a part of this wealth was ‘lost’ during the financial crisis.

Wealth inspections

The wealth audits performed by local tax authority with increased intensity from 2007 may have also contributed to the fact that private persons conceal their income from untaxed sources (or for which they paid taxes irregularly). One of the simplest solutions – which, according to the experts interviewed, is also one of the methods most frequently used by private individuals – is to keep the accumulated wealth in cash, as cash is anonymous and its source of origin is difficult to check. In the context of the more frequent use of wealth audits, citizens often withdrew

¹⁵ Obviously, there are numerous cases where no cash flow is associated with the fraud and all transactions are executed electronically. The above example presents only a possible type of fraud without claiming that malicious orders inevitably involve cash flow.

¹⁶ Although this fact is supported by the statistical analysis of Simon (2009), it should be noted that, owing to the structure of accounting reports, the analysis typically relied on data obtained from larger corporations.

in cash the assets they or their relatives kept on bank accounts ‘without particularly being questioned by the authorities’, and have kept their holdings in cash ever since.¹⁷ It should be pointed out that the tax authority is not in an easy position in conducting the audits, as it is fairly difficult to determine a realistic rule of thumb for calculating the amount of cash that a citizen could potentially ‘accumulate’ from legally obtained income. It is difficult to find an objective measure to calculate the amount of money citizens may need to cover their daily expenses and the proportion of their income that they can save realistically, considering that they have different occupations and live in different locations.

The long-term impact of the wealth inspections on cash usage may in fact offset the initial increase in cash demand, as it may contribute to identifying and thereby diminishing fraud related to cash on hand, shareholders’ credits granted to firms and black and grey employment.¹⁸

Impact of the interest tax

We also asked the experts interviewed about their experiences with the impact of the interest tax on cash usage. Lost interest can be regarded as the opportunity cost of wealth accumulation in cash, and the interest tax introduced on 1 September 2006 lowers this opportunity cost, as it mitigates the net return on various financial savings.¹⁹ Regarding the impact of the interest tax, the experts thought that following its introduction it may have temporarily increased cash holdings, but that over the long term it should not have encouraged cash savings in and of itself, owing to the relatively high HUF interest rate.

Lack of trust – circular entrepreneurial outstandings

During the interviews *lack of trust among business partners* was often cited as a feature characterising Hungarian economic participants in general, which has grown even stronger in the context of the financial and economic crisis. Hundreds of firms have gone bankrupt recently – and not only in the notorious construction and food sectors – on account of clients’ intentional failure to pay their claims, which generated *circular outstandings* and severely affected hundreds of supplier companies. In many cases, malicious owners ‘transfer the assets out of their company, and in the

meantime accumulate substantial balance of trade payables and public debts only to make the company go bankrupt intentionally or sell it to fictitious persons’. As a result of this behaviour, the entire supplier network of the specific company – proceeding in good faith – is put in a critical liquidity position, and in most cases they are also threatened by bankruptcy. This situation has been further aggravated by the crisis as clients failed to pay not only because of malicious intent, but because ‘their banks unexpectedly withdrew’ the financing they had previously provided.

In the context of the crisis, payment methods have undergone a transformation in nearly every sector, and this trend may be attributed to the problem described above. While 30-day electronic transfers continue to be commonly used, the number of suppliers demanding advance payment, on-site settlement or prompt payment has increased perceptibly, and so did the number of associated cash transactions.²⁰ Even those continuing to use account money mainly prefer advance payment. This payment method is extremely damaging as it *slows down the operation of the economy dramatically*, and those unable to pre-finance their operations independently find themselves in a very difficult position.

As opposed to the majority of those interviewed, some experts have questioned the direct correlation between lack of trust and cash usage. Indeed, they find it illogical that suppliers should request cash payment exclusively on the grounds of lack of trust. It is undoubtedly a lot simpler and safer to make an advance payment electronically rather than in cash, and if the client pays (or fails to pay) after performance, it will be inconsequential whether non-payment occurred in cash or account money. In the opinion of the experts following this train of thought, the increase in the number of firms preferring cash payment has more likely resulted from a fairly substantial shift to black/grey sales and operations.

Cash-oriented nature of public administration

The substantial level of domestic cash usage compared to international benchmarks is intensively facilitated by the state itself. *For the most part, duties, penalties and procedural fees can be paid in cash* – by way of money order forms commonly called ‘yellow slips’ –, *and only a limited number*

¹⁷ Obviously, they have been spending some of the cash holdings continuously ever since.

¹⁸ Assuming that the trends which started in 2007 will continue and the same high number of audits can be expected in the years to come.

¹⁹ Obviously, the cash transactions described in the other points also have opportunity costs as the fictitious invoice ‘must be purchased’ and other risks associated with cash holding emerge; however, the participants concerned gain significantly more profits through these informal transactions than the costs they incur.

²⁰ It is typical of ‘remote suppliers’ to demand advance cash payment.

of state offices allow electronic payment. On the outflow branch of government operations, cash is the dominant payment method for transfers as well. At present only 42%²¹ of benefits are transferred to bank accounts and the share of cash in the disbursement of various social benefits is also substantial.

Regarding the cash-oriented nature of the government, experts expressed that one of the major problems was the intensive use of *postal cash payments*, which they thought should be restricted.²² In their view, regulatory decisions and the provision of information to consumers are both required for the reduction of postal cash payment use. In many cases, employees do not mind obtaining their income in the ‘lower (minimum) wage plus cash scheme’ because it allows them to settle their main expenses in cash, and the use of postal cash payment supports this practice. ‘According to public belief’, another benefit of the postal cash payment is that it contributes to citizens’ liquidity management (they are free to decide when to pay it). However, the question arises whether citizens are aware of the fact that in exchange for such freedom a household may have to pay thousands of forints each year. Indeed, service providers issuing the ‘postal cash payment forms’ typically pass on the transactional fee associated with the use of these payment form to the customer without properly informing them about this, or transparently showing the fee charged for issuing them on the invoice. On the top of that, invoices for the most basic services – such as water, electricity, natural gas, district heat, phone, Internet – should inform consumers clearly and transparently as to the exact portion of the invoice amount that represents the cost of the postal cash payment. Another problem is that, in many cases, clients using the direct debit option are also charged by service providers for the cost of postal cash payment; thus, in their current practice, providers practically ‘spread’ that cost to their entire consumer base.

Installing *POS terminals in the document service centres* and supporting electronic transfer options for the payment of tax revenues are positive initiatives to reduce the cash-oriented nature of the government’s operation. Under the Electronic Public Operation Operative Programme, document service centres were originally expected to fully implement the technical conditions required for card payments by 1 July 2009, but this has not been completely accomplished to date.²³

NATURAL LIMITATIONS OF CASH USAGE

In this chapter, we present certain ‘natural motivators’ cited during the interviews as factors, which could potentially limit cash usage in a quasi-spontaneous way and formalise the hidden economy without any special intervention.

According to the experiences of experts, in the lack of regulations, *employers tend to switch to applying legal employment forms primarily when forced to do so by sectoral concentration*, as a result of natural economic processes. Obviously, if an owner and/or manager wish(es) to sell its business or make it attractive for investors, the disproportionate and distorted cost structure entailed by the practice of semi-legal employment cannot be sustained any longer, while it is also clear for the investor that the business does not generate the profit indicated in the company’s books. This prompts companies to start showing the actual costs in the accounting documents, including cost category proportions, leading to a shift towards the legal employment of employees. Sectoral concentration may also yield results in curbing uninvoiced sales and the issuance of invoices for lower amounts than the actual value. This reflects the same reason as in the previous case: the owner/manager becomes motivated to indicate the real profit and cost structure in the financial statements, and thus starts formalising its business activity voluntarily.

It has been a general positive experience particularly as related to retail sales and the closely related food processing sector, that the *sectoral concentration* described in the previous point and the *IT developments of firms stimulated legal operation, backed by supporting accounting documents*. In general, where – thanks to the integrated ERP- system – sales-related invoicing was linked to real-time inventory management, the examined fraud types have nearly disappeared. As the experts pointed out, the very heavy use of cash in retail sales is not only attributable to the illegal cash usage associated with the discussed purchases and employment, but also to the number of POS terminals available in retail sales units, which, in many cases, is intentionally low. In retail sales units with smaller floor space located in the countryside there are very limited options for the use of electronic payment.²⁴

In the introductory section of the study we presented an intuitively verifiable statement, according to which

²¹ Source: Central Administration of National Pension Insurance, the figure is specified as a percentage of pensions. However, it should be noted that pensioners often withdraw the amount of money credited to their current accounts immediately, in a lump sum.

²² For more details on the turnover of yellow slips and the related settlement procedure, see: Turján (2009).

²³ Source: Ministry of Finance, IT Service Centre. The programme may be followed at: <http://www.nfu.hu/doc/329>; and www.pmiszk.gov.hu/letoltes/uvegzeb/uvegzeb_34.pdf, date of downloads: 13 January 2010.

²⁴ Source: Helmeczi (2010).

businesses exhibit substantial demand for cash in order to be able to perform various transactions linked to the hidden economy – such as grey wage payment, illegal purchases or the illegal payment of capital income or dividend to the owners. Thus the experts interviewed reached the conclusion that the enhancement of the POS infrastructure may clearly stimulate the reduction of cash usage and the associated hidden transactions. Indeed, if firms realise a higher portion of their sales revenues electronically, they will have less latitude for informal cash transactions. At present, as only a limited portion of retail sales and catering units have POS terminals, citizens are not provided with sufficient safety to perform their daily transactions electronically without being concerned about whether they will be able to pay when they do not have cash on them.²⁵ Consequently, an enhancement of the domestic coverage of POS terminals – which is considered low in international comparison – has double significance: it may reduce cash usage, and at the same time, curb the transactions of the hidden economy.

Most experts believe that the main condition for reducing the use of cash – in addition to increasing the POS coverage – is to improve (restore) trust among business partners. In this context, nearly every expert we interviewed indicated that a transparent, up-to-date, easy-to-access and free company registration process would be a big step forward, allowing companies to obtain detailed information about the capital position, results and payment discipline of their potential partners, as well as their attitude towards their employees and potential previous businesses of the owners.²⁶ Although an increasing amount of key company information is already available, the problem is that potential business partners may not be able to access the relevant data from a single source. Consequently, gaining access to data is a time consuming exercise, and certain data of key importance may be obtained – obviously, for a fee – from specialised service providers only.

CONCLUSIONS

In this article, we presented some factors behind the exceptionally high domestic cash volume, which justify intensive cash usage above and beyond the realistic economic needs. The experiences of the experts interviewed indicate that the cash demand of the non-observed economy is broad-based and widely extended; moreover, the lack of trust manifested in the transactions among firms on account

of circular debts, combined with the traditional cash-oriented operation of the government, also stimulates growth in cash volume. Based on the results of the expert interviews, we believe that a reduction of the current high level of cash usage would be desirable from several aspects, for example, it would contribute to restricting the informal economy's room for manoeuvre. While we are quite aware that the *hidden economy* may not be fully eliminated and taking action against it does not fall within the MNB's scope of basic competencies, we believe that preventing it from gaining ground and limiting the damages it causes serve important public interests, which may in fact call for government intervention. It is obviously important to emphasise that the fight against the hidden economy is rather complex and requires comprehensive and coordinated policy action, in which the curbing of cash usage may be a potential tool.

REFERENCES

- BABBIE, E. (1995): *Practice of Social Research*, Balassi Kiadó, Budapest.
- ELEK, P., SCHARLE, Á., SZABÓ, B. AND SZABÓ, P. A. (2009): "The Proportion of Black Employment in Hungary", in: Semjén, A. and Tóth, I. J. (eds): *Hidden Economy – Unreported Employment and Income Concealing – Government Actions and Responses of the Economic Actors*, MTA KTI Books – 11., MTA KTI, Budapest, pp. 84-102.
- KESZY-HARMATH, Z. (2008): "The payment card business line in Hungary", URL: http://www.mnb.hu/Engine.aspx?page=mnbhu_penzadatok&ContentID=12288. Download date: 07 January 2010.
- KREKÓ, J. AND P. KISS, G. (2008): "Tax evasion and tax changes in Hungary", *MNB Bulletin*, April 2008.
- LACZKÓ, M., SEMJÉN, A., FAZEKAS, M. AND TÓTH, I. J. (2009): "Hidden Economy, Hidden Employment – Research Results and Government Policy in the Light of the International and Domestic Professional Literature" in: Semjén, A. and Tóth, I. J. (eds): *Hidden Economy – Unreported Employment and Income Concealing – Government Actions and Responses of the Economic Actors*, MTA KTI Könyvek – 11., MTA KTI, Budapest, pp. 17-42.

²⁵ See Keszy-Harmath (2008).

²⁶ This requirement of the entrepreneurial sphere is also indicated by the fact that recently, several IT consulting companies have successfully specialised in compiling positive and/or negative supplier debtor lists and supplying information on businesses.

EXPERT COMMITTEE EXAMINING RETAIL FINANCIAL SERVICES (2006): *Closing Study Titled Recommendations on How to Handle the Problems of Retail Bank Services*. URL: <http://www.meh.hu/tevekenyseg/tevekhirek/20070131.html>. Download Date: 09 December 2009.

MAXWELL, J. A. (1996): *Qualitative research design: An interactive approach*, Sage, Thousand Oaks, California.

ODORÁN, R. AND B. SISAK (2008): Cash demand of the Hungarian economy – is the shadow economy still running

smoothly? *MNB Bulletin*, December 2008. URL: <http://www.mnb.hu/Engine.aspx?page=mnbhummnbszemle&ContentID=11896>. Download date: 07 January 2010.

SIMON, B. (2009): “The role of cash in corporate financial management – Where are petty cash holdings high?”, *MNB Bulletin*, December 2009.

TURJÁN, A. (2009): Postal payment services in Hungary, *MNB Occasional Papers* 83.