
Future tendencies in the financial markets in Mongolia and worldwide

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Abstract: This article analyses latest development in the banking sector and its relevance to Mongolia. Moreover, latest developments of the activities of international financial institutions (IFIs) are provided and compared with the existing options for the banking system in Mongolia.

Keywords: international cooperation; international financial institutions; IFIs; banking; Mongolia.

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1 Introduction

This section presents tasks of banks in Mongolia and Europe and related recent developments in the banking landscape.

Based on its most fundamental tasks (North, 2009), a bank is a credit institution providing capital, credit and payment services. Moreover, international financial institutions (IFIs) play a central role in the international financial markets (Bader et al., 2013). The target for any developmental cooperation is to fruitfully combine the modes of operation of these two main components.

The real function of the bank is the allocation of credit, investment function and economic function (Jung and Pieper, 2010). It also follows the monetary functions and the settlement of cash transactions. The basis of bank business is above all the lending and administration of savings deposits. In addition to these main functions, there are three economic functions that a bank has to fulfil:

- maturity transformation
- risk transformation
- lot size transformation.

Private customers, corporate clients, states and other banks represent the most important customer groups of a bank.

Regarding business segments of the banks (Ziegler, 2008): due to the essential importance of banks for all economies, their tasks are usually clearly regulated by national legislation.

Banks' classic business areas (Werner, 2015) are on the one hand deposit business, cash card transactions, credit transactions, etc. These also include entering into obligations, loan claims before maturities and investment transactions.

1.1 Competitors of the banks

Banks' inherent responsibilities are now attracting various players seeking to fulfil some of the functions of banks. Bain & Co. Business Consulting (2019) estimates that around 3,500 start-up companies are trying to squeeze banks out of the financial market.

These include the so-called non-banks such as PayPal and Number26, direct banks, financial technology companies (FinTech companies) and other financial institutions.

Developments of the banks lately: of particular interest to the development dynamics of the banking sector are the changes in the way banks perform and carry out their tasks. As far as risk management is concerned, there have been some developments in recent years, which are outlined below.

2 Banks: procedures and products

2.1 Securitisation

An example of increasingly focussed innovative financial products is securitisations. The large number of changes in the framework conditions of various markets in the '70s and '80s led to the development of the securitisation (see Merk, 2017).

In the case of securitisation, a bank (in this context often called originator and originating bank) first enters into loans on the assets side according to certain criteria (also package, special fund, pool, portfolio called) together. Typically, these bundles include similar loans (congeneric loans), such as loans granted to companies, mortgage-backed loans, leasing receivables or loans. In detail, there are now many and many different forms of mixing.

In a second step, the bank sells the bundled receivables to a special purpose vehicle (SPV). In return, the originator receives the value of the claims taken over by the SPV immediately in cash. Thus, a legally valid and non-recourse transfer of receivables from the originator to the SPV takes place. However, the SPV does not receive individual information about the receivables assigned to it; all credit files remain with the originator (see Merk, 2017).

2.2 Syndicated loan

Syndicated loan (means that several well-off and internationally well-accustomed well-funded banks occasionally lending to a good address) combining very high borrowing requirements, each institution contributes a certain amount (partial amount) of the borrowed amount to the borrower (borrower).

Advantages of this form of the credit are risk spreading, also cost reduction for the supervision of the debtor. The division of the corresponding tasks between the

participants of the consortium will reduce the costs. A higher profit can also be achieved and individual banks can use derivatives to pass on the risks they have taken from their contribution to the total loan to other market participants.

As a result of these developments, the main business area of the banks has changed in recent years. Above all, large banks “act as the initial originator of loans and then pass on credit risk to other market participants through derivatives and securitization (shifting credit risk to the capital markets).” This is also referred to as a change from a commercial bank to an intermediary bank, which generates a trade or commission profit for passing on credit risks: an originate-to-distribute strategy. At the same time, banks around the world are pursuing a safe investment policy. As a financial asset (permanent assets), they prefer to buy EUR, USD, GBP, JPY and CHF-denominated government bonds (gilts) in order to be able to cover the highest possible proportion of banking-related fixed costs from their earnings (see Merk, 2017).

2.3 Online services

In addition to the above-mentioned shifts in risk management, technological innovations in particular are putting high pressure on innovation; an example of this is online services.

In line with demand, business transactions via online services are increasingly being offered. The internet is used by the banks mainly for payments and advertising purposes. The most important requirement ‘safety’ must be met.

When it comes to banking services through online services, there are qualitative benefits and opportunities for banks to make service delivery more efficient. Although the customer cannot achieve a direct financial advantage in most cases, he also benefits from the higher quality and much higher customer friendliness of this time and space flexibly configurable communication option with the bank. The existing technical restrictions for distribution via online services can be abolished by the development of ‘electronic money’ (see Ahamer and Kumpfmüller, 2013).

Competition in the banking sector has become more intense in recent years, and it will tend to be reinforced by digitisation in the future. Thus, it is to be expected that customer loyalty in the future will be even more strongly determined by the efficiency, flexibility, reliability and customer friendliness of the online access offered by the individual banks.

2.4 Origin of PIN and TAN

The following is an important detail of online access as illustration.

By PIN-TAN procedure (this is a so-called two-factor authentication), the authorisation for online banking of users is examined. This makes every transaction safer.

2.4.1 Current problems

The financial services sector is facing a change. New technology-based start-ups and other competitors are increasingly entering the market. These so-called FinTech companies have alternative offerings and business models that traditional banking processes do not offer in many areas. More and more customers are thus migrating to FinTech companies, and banking income in the traditional sense is endangered.

2.4.2 *Future tendencies of the banks*

The most important future trends for banks can best be summarised under the term digitisation.

What does the future of the banks look like? Financial institutions around the world are addressing this issue in order to remain in the marketplace. Banks are faced with the challenge of competing with FinTechs and are forced to find a solution that meets the needs of digitisation and the needs of their customers. FinTech companies use state-of-the-art technologies that rock established financial systems.

“A Gallup poll found that only 26 percent of people trust their banks. For this reason, banks are currently losing their best employees in droves to the FinTech sector. The fact is that four of the largest US and UK banks have lost 350,000 jobs over the past seven days.” (See Neumann, 2017)

From a customer perspective, FinTechs' services are easy to use (82%), offering fast service (81%) and a good customer experience (80%). By contrast, traditional banks see personal care and trust as their greatest asset. But the statistics in the Banking Report show that more and more people (88% across all investigated regions) trust their FinTechs and even more customers would recommend their FinTech providers than their bank. In Western Europe, only 36.4% would recommend their bank, but 51.8% would recommend their FinTech. Banks generally underestimated their competition. The extent to which FinTechs are well received by users through their ability to change and adapt is thus significantly underestimated by banks, according to the study. To respond to this trend, nearly two-thirds of surveyed bank executives consider it necessary to consider FinTechs as a partner. The majority of the proposed strategies are currently moving towards cooperation (46%) and investment (44%). Acquisitions currently play a minor role (18%) (see Kluger, 2016).

The expectations of the customers have also changed recently: high demands on flexibility, accessibility from mobile phones, independence, etc. and more online offers than in person.

Banking must be flexible, always available and easy to use.

For the bank of the future, this means a restructuring through digitisation, because only in this way can banks remain attractive and profitable. It is crucial for the future success not only when, what, and through which channel they offer, but also how they offer the services.

Digitisation is seen not only as a challenge, but also as an opportunity for the banks. Because there are also positive aspects of digitisation. Indeed, new customer expectations increase the supply and minimise the time and money the traditional banks have had.

2.4.3 *Current use of financial services*

This section provides a quantitative overview of customer behaviour regarding financial services.

The focus is on the behaviour of the particularly relevant young bank clients (25 to 30 year olds) and a study of the University of Stuttgart-Hohenheim (Brettschneider, 2015) used. Figure 1 clearly shows that standard simple financial services related to credit cards and checking accounts are handled by a majority, especially online, but less one-off strategic acts such as buying and selling stocks.

Figure 1 Online or offline banking (see online version for colours)

“Which financial services are you using presently? Multiple answers are possible.”
(answers in percent of the 25 to 30 years olds)

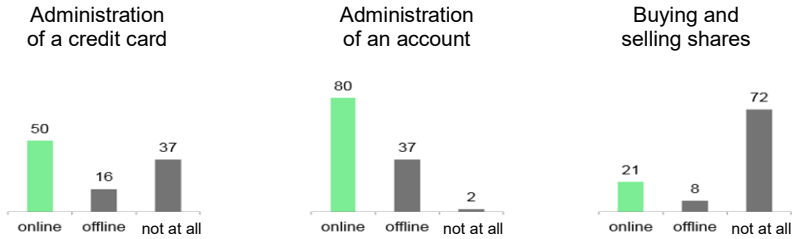


Figure 1 shows answers to the question of whether current financial services by young bank customers are more likely to be used online or offline.

The statistics in Figure 2 are concerned with the answers to the question of how benefits of financial services (online vs. offline) are perceived by young bank customers.

Figure 2 Benefits of financial services (see online version for colours)

“If you compare the services you can receive from a bank branch with the services you can receive from the online portal of a bank: where does the following apply more?”
(answers in percent of the 25 to 30 years olds)

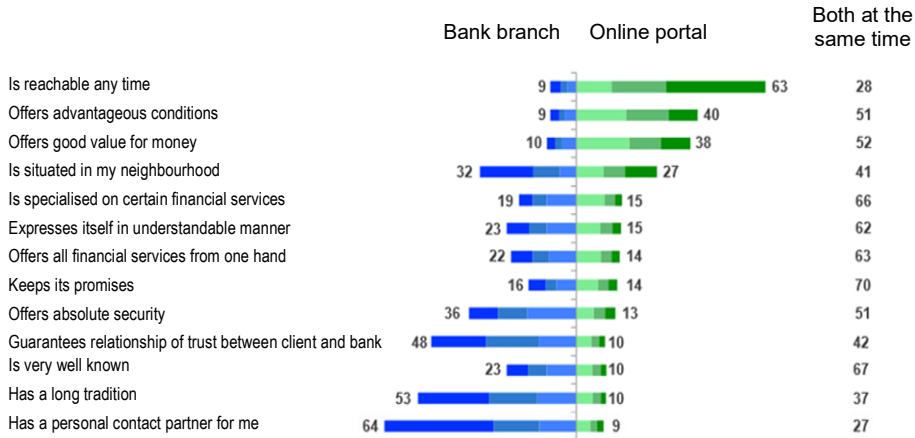


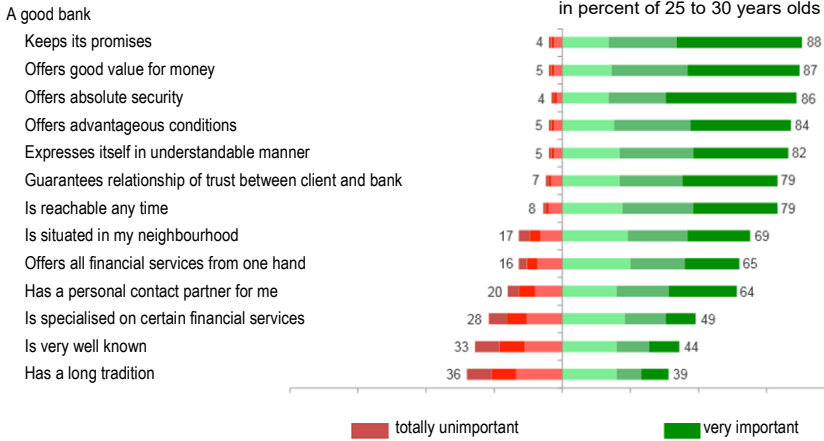
Figure 2 also shows that the main advantages of the online portal are accessibility, value for money and favourable terms.

2.4.4 Characteristics of a good bank

Figure 3 shows that customers attach great importance to the trustworthiness, value for money, accessibility and favourable conditions of their bank.

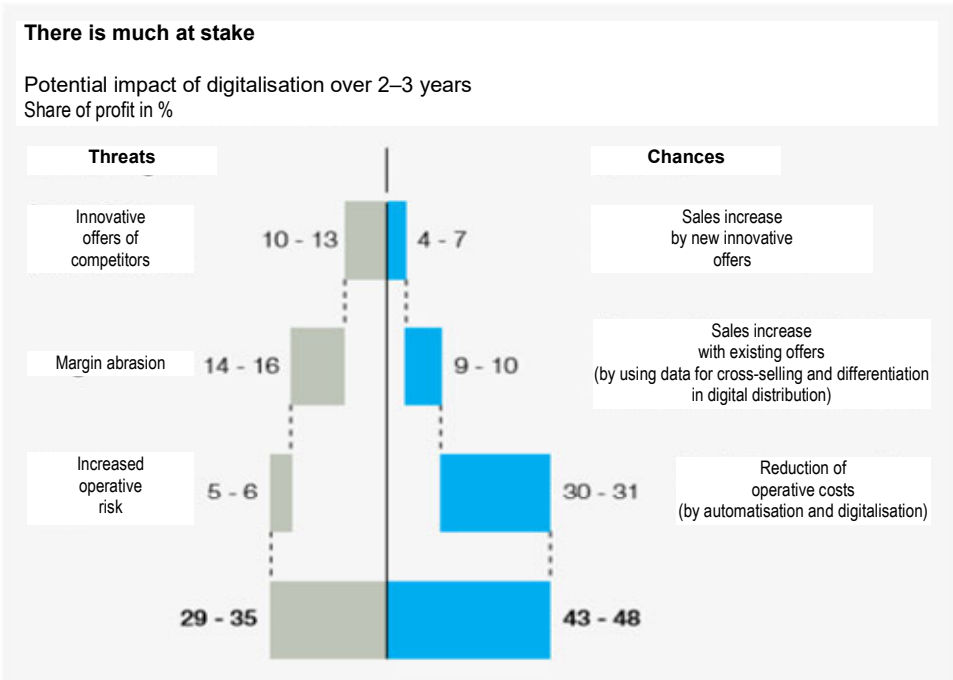
Figure 3 Weighting of the quality criteria which banks should meet in the eyes of young customers (see online version for colours)

“If you think in general of a bank or other providers of financial services: how important are for you the following features when you want to assess their performance?”



Source: Brettschneider (2015)

Figure 4 Threats and opportunities of digitisation (see online version for colours)



Source: McKinsey’s analysis and Conserio (2017)

2.4.5 Analysis of the threats and opportunities of digitisation

All in all, the survey results mentioned above can be summarised in such a way that trust, a good price/performance ratio, favourable conditions and a convenient location are important to bank customers.

3 Stock exchanges

After describing new developments regarding banks, this section focuses on the stock market and developments to be expected (Juraform, 2018).

The mechanism of a stock market is in principle very simple: the stock market is a market in which prices and prices for securities and goods are formed. Trading on the stock exchange is not – as in a market hall – operated directly between buyers and sellers, but by authorised persons, the traders (see Vienna Stock Exchange, 2018).

The important economic function is fulfilled by the stock market, bringing together investors and entrepreneurs who need capital. It is an indicator of the capital market in a country.

The exchange provides trading platforms, permits new stock market issues and ensures transparency of prices and sales. Calculation of indices is also one of the main tasks of an exchange.

The history of the stock market can be traced back more than 500 years. Already in the Middle Ages, merchants met at commodity markets and fairs to exchange their products. Since the coinage was still very unstructured and the payment traffic was difficult to design, the first exchange offices were founded in 1402. Mainly at first only with coins and change papers was traded. In the 17th and 18th centuries, the first joint stock companies emerged. One of these first corporations (the East India Company) created the stock as a financing instrument and thereby made a significant step in the world market. At that time, the idea was still to trade shares of the company without repayment of capital or new borrowing.

The Austrian National Bank launched the first dividend papers in 1820. From the Industrial Revolution of the 19th century until today, the stock plays a significant role in the economy.

Traded on the stock exchanges with securities of capital procurement and capital investment, e.g., are the investment certificates, bonds or shares. It also trades in freight transport goods (waybills, warehouses, bills of lading) and primary school letters (checks, transfers, savings accounts).

Depending on the type of legal right, a distinction is made between membership or equity securities (shares, fund units) and debt securities (bonds). In addition, securities have different transferability. First, these are the folder papers. The proprietor is mentioned by name, but they are transferable by agreement and endorsement. After that come the bearer papers. Bearer securities include bearer shares and bearer bonds and are the most traded papers. Since the owner is not noted by name, they are easily transferable.

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3.1 Investment opportunities

For the investor, there are various ways to invest which are explained in more detail below.

3.1.1 Shares

The share certifies the membership right of the shareholder of a stock corporation and generates income for investors from price gains and dividend distributions:

With the acquisition of a share, the owner is also co-owner of the company assets and thus the shareholder has certain rights and obligations. The main obligation is the performance of a deposit on total capital. The sum of the shareholder's par value in relation to the total nominal value is decisive for the extent of his rights. The price of the share depends on supply and demand.

3.1.2 Participation certificates

Participatory certificates are divided into three types: profit participation certificate with variable distribution, profit participation certificate with fixed distribution, profit participation certificate with conversion and option rights.

In its form, a participation certificate is similar to a stock or fixed income security. It is a creditor paper that securitises asset rights and is associated with profit entitlement.

3.1.3 Investment funds

Investment funds are referred to as non-par value bearer securities. The owner has co-ownership of a fund managed by an investment company. Mutual funds are an alternative option for those who consider a direct purchase of shares too risky. The management of the investment funds takes over the investment company from the owner, so that after the acquisition he has practically nothing to do. In contrast to shares, the owner of a mutual fund has no right of participation and the participation does not exist in the investment company but in the fund. Another difference with equities is that there is no exchange trading in mutual funds. The open investment funds can be returned at any time at the redemption price to the investment company. However, there are also closed funds, where the return is not possible at any time. A distinction is made between real estate funds (open and closed), securities funds (equity funds, bond funds, mixed funds), growth funds and distribution funds (annual payout).

3.1.4 Index certificates

Through index certificates, the holder has the opportunity to participate in the development of stock indices without having to buy papers. The owner is entitled to a payout amount that varies depending on the value of the index on the due date. There is a distinction between price indices and performance indices. A price index takes into account the price development and the price deductions made in the dividend distribution. Unlike the price index, the performance index takes market-driven price movements into account.

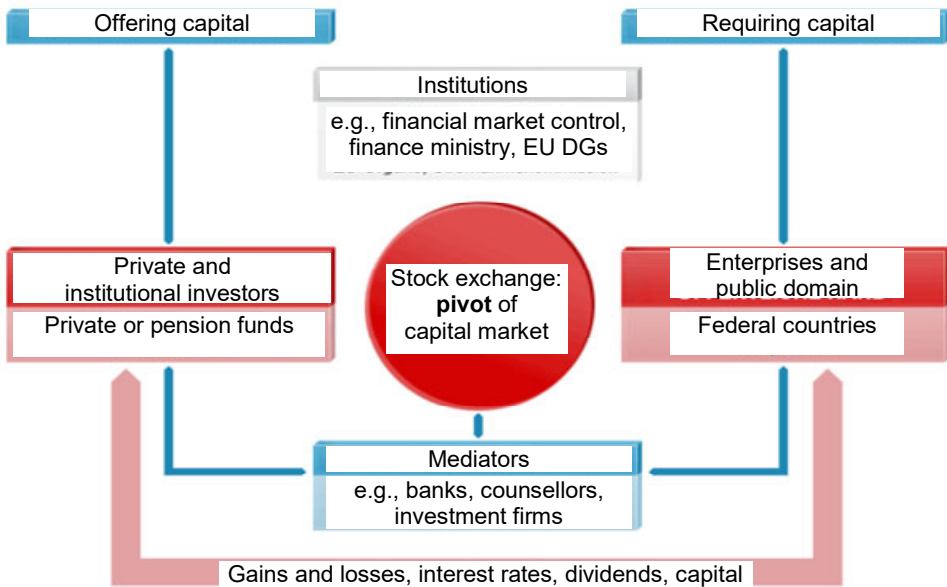
3.2 Factors that influence stock price movements

Factors that influence share price movements include raising or lowering interest rates, money growth, industrial investment, the labour market (e.g., rising unemployment leads to a reduction in total labour income), consumption propensities or exchange rates.

3.3 Main players in the capital market

The main players in the capital market are the capital consumers (the public sector, the federal government, companies, etc.), the capital providers (private investors, institutional investors such as insurance companies, investment companies, financial institutions and others), the intermediaries (the so-called intermediaries such as advisers, intermediaries, dealers, liquidators), which are called legislative and supervisory institutions such as the Ministry of Finance (Figure 5).

Figure 5 Main actors at a stock exchange (see online version for colours)

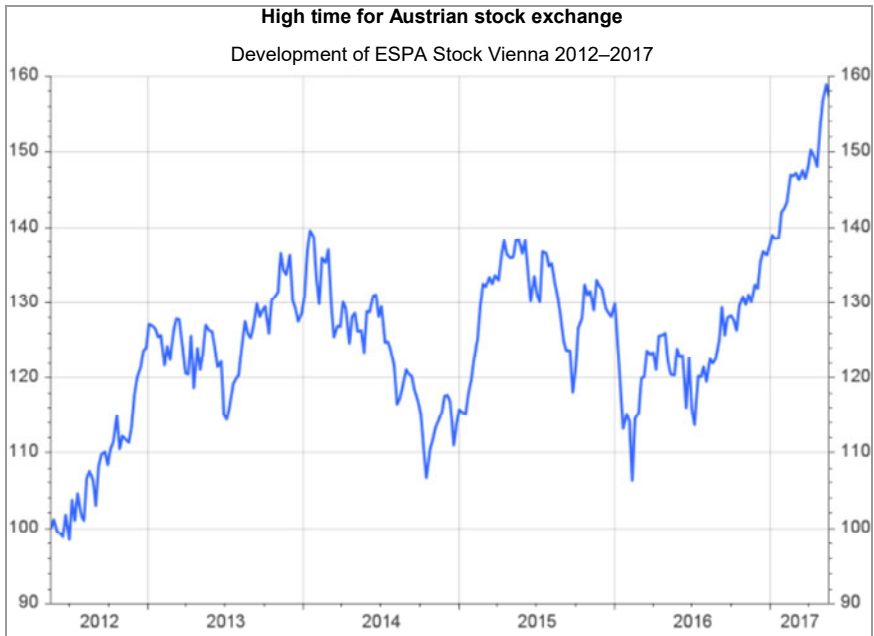


Source: Vienna Stock Exchange (2018)

3.4 Development of Austrian shares lately

The Vienna Stock Exchange follows the outline of global development, but also has its peculiarities.

Following the British Government’s initiation of Brexit, it was suspected that the ATX Vienna share index will decline. But the opposite has happened (Figure 6).

Figure 6 Development of the stock index (see online version for colours)

Source: Thomson Reuters Datastream and *Stock Exchange Dictionary* (2017)

3.5 Bitcoin

The following section deals with a recently current topic, which includes aspects of an exchange event (Strutzenberger, 2016).

As the first successful implementation of a cryptocurrency, bitcoin has gained popularity with the media and is currently driving the market considerably. Bitcoin was just a few cents a few years ago, but currently (2018), it is worth more than \$8,500.

It is a cryptocurrency, which is also referred to as digital money. The cryptocurrency, which consists of calculated and encrypted data blocks, is calculated on a decentralised basis by many people with computer power and is not subject to any state control. The step to decentralise the generation of means of payment is thus targeted.

Using blockchain technology, transactions are transacted and stored in encrypted form. This technology offers the assurance that the transactions cannot be corrupted. Each transaction is publicly available. The algorithm on which bitcoins are based is generally considered counterfeit-proof.

For the safekeeping and payment with bitcoins, the so-called software wallet is needed.

Bitcoin does not yet fulfil all the monetary functions, yet the number of companies that accept bitcoin as a means of payment is steadily increasing. For example, in Japan, bitcoin has recently been declared an official form of payment alongside yen. Whether it will be accepted as an alternative means of payment in the future remains over.

Measured against the real currencies, the virtual currencies currently circulating, such as bitcoin, are currently quantitatively insignificant, at least in countries with a stability-oriented monetary policy, and are more likely to be speculative assets. None of

the three monetary functions to the economically relevant extent is yet met by bitcoin, because virtual currencies currently do not extend beyond a niche and is unstable value (see Tiele and Diehl, 2018).

Furthermore, the fundamental criticism is that in a dynamic world, rigid algorithms for the development of the money supply should lead to a sub-optimal money supply. At the same time, it can be deduced that an active monetary policy through an independent and stability-oriented central bank is necessary. Central banks, which do not keep the monetary value of their currency stable, nevertheless remain vulnerable to parallel currencies and currency competition, and not only to virtual currency.

3.5.1 Tax law and cryptocurrency

In order to be able to answer whether the exchange of bitcoins has tax relevance, it must first be clarified to what extent bitcoins can be subsumed under existing laws. With regard to Austrian law, the main issue to be resolved here is whether bitcoins are exempt from tax under Section 6(1) UStG (Austrian Value Added Tax Law, 2019).

Paragraph 6(1)(8)(b) of the UStG exempts turnover and the intermediation of legal means of payment from VAT, and Paragraph 6(1)(8)(c) UStG, in turn, excludes transactions in monetary claims and the intermediation of such transactions. Lawyers judge bitcoins as a means of payment according to §1 Abs 1 Z 6 BWG; while state institutions disagree with this view. The applicability of §6(1)(8)(c) of the UStG is to be ruled out since no claims are to be assumed at bitcoin, as could already be shown in the course of the regulation by the Financial Market Authority [see Loukota and Wimpissinger, (2014), pp.63–96].

3.5.2 Advantages and disadvantages of cryptocurrency

Key benefits of cryptocurrency include third-party independence, faster settlement of transactions as well as new types of transactions and the alternative to error-prone monetary policy.

The drawbacks of the cryptocurrency are that the cryptocurrency is not state regulated, that it requires a high volatility and a lack of fulfilment of the monetary function.

3.5.3 Current price development in graphic form

The recent performance of bitcoins was at the turn of the year 2017–2018 in the headlines because of strong price losses; Figure 7 shows them as price ratio.

3.5.4 Future trends in stock markets

In order to be able to control your own behaviour and measures with regard to stock exchanges as well as possible, a knowledge of expected trends in terms of quantitative as well as structural changes is very desirable – and at the same time, very difficult to determine.

Through global integration and further penetration of technology, there is fierce competition between exchanges, both nationally and internationally. Improvement and cheapening of the service offering are also demanded by stock exchanges.

Figure 7 Evolution of the bitcoin price (see online version for colours)

Source: Bohm et al. (2017)

Experts see the future differently. According to some experts could be expected to crash on stock markets. Accordingly, in New York and Asia, prices are under great pressure. The DAX is also faced with a massive loss. Many observers even speak of a tendency of stock market crisis.

Political risks, such as the unpredictability of US President Donald Trump or a changed economic policy in China, are largely present, emphasises Stefan Bielmeier, Chief Economist of DZ Bank. So far, these have largely been hidden by the investors, but that could change quickly. Also, investors became increasingly worried that stocks were not already too expensive. This recently sparked a sell-off, especially for US technology stocks. “The key challenge for 2018 is fear of heights”, says David Kohl of Bank Julius Baer (see Der Trend, 2018).

According to Reuters data, the price-earnings ratio (P/E ratio) in the DAX is currently at 14.6 – the price of these 30 stocks thus exceeds the earnings per share on average by more than 14 times. But this is still below the long-term average of a P/E ratio of around 15. By comparison, in times of the internet bubble at the turn of the millennium, the P/E was about twice as high. Nevertheless, nervous investors could increasingly take profits, marketers say (see <https://de.reuters.com>).

Other factors include the currently still strong euro, because a strong euro weakens the sales opportunities of export-strong companies in the Eurozone in world trade by increasing the price of goods.

4 Cybercrime and security

In Section 4, this article addresses issues of security.

Particularly in today’s digitised world, the dangers inherent in the internet also have a particular impact on the topics discussed so far.

Cybercrime includes all malicious activity that intentionally interferes with, spies on, or harms individuals, computers, databases, software programs and communications links on the internet. Cybercrime is the generic term for all criminal acts on the internet, be it for your own benefit or to the detriment of others (see IT-Wissen, 2018).

Cybercrime exists in many forms. These are mainly fraud, forgery, and unauthorised access to data. Phishing e-mails attempt to access sensitive personal information while stealing the victim's identity through Trojans. This allows the attacker to hack the victim's bank accounts or gain access to social media platforms such as Facebook or Twitter. Other malware such as viruses, worms, spyware, mailbombs, spams, or hoaxes use attacker software to block the computer, retrieve data, and other malfunctioning of victims' computer systems.

So-called darknet platforms, which are not accessible from the outside (from the public web), are also used to carry out criminal acts on the internet. Since the perpetrator can carry out the criminal acts almost from any location and disguise his track well, this form of crime is extremely dangerous.

The most prevalent conventional attacks are credit card fraud, ransom blackmail, financial gain, identity fraud and various scams.

In addition to these conventional attacks, there are also technological attacks that are widespread. As an example, the installation of malicious programs or spyware, as well as damage or data theft can be mentioned.

The Federal Criminal Police Office, the European Cybercrime Centre (EC3) at Europol and Interpol are in action for the fight.

4.1 Security strategies to fight cybercrime

To minimise the risk of cybercrime, one must:

“Regularly install security updates of the operating system and installed programs, update the antivirus software used, set up a firewall, restrict the rights of used user accounts, handle sensitive personal data, use secure browsers of secure passwords; regular renewal, data transfer only over encrypted connections (recognizable by the https communication protocol), uninstalling unneeded software, creating backups, using Wi-Fi over encryption standard WPA2, checking the security status of the computer.” (See Anwalt, 2018)

4.2 Code of conduct

First and foremost, a secure password is important. It should contain at least eight to ten digits including numbers and special characters. There are no unknown programs to download. Important data should only be transmitted encrypted to third parties and caution with attachments and unknown senders.

5 International financial institutions

5.1 IFIs in general

Especially in Central Asia, “international financial institutions (IFIs) play a major role in the social and economic development programs of nations with developing or transitional economies. This role includes advising on development projects” (Ahamer, 2004, 2006, 2008a, 2008b 2012a, 2012b, 2013a, 2012b, 2017; Müller et al., 2013), funding them and assisting in their implementation.

Most IFIs are fed by a multitude of borrowing and donor countries. All however (Duraković et al., 2012), “share the following goals and objectives:

- to reduce global poverty and improve people’s living conditions and standards
- to support sustainable economic, social and institutional development
- to promote regional cooperation and integration.”

“The main strategies for IFIs are loans (credits) and grants to national governments. IFIs can also provide a mix of loans and grants, equity or guarantees. Such funding is usually tied to specific projects that focus on economic and socially sustainable development. IFIs also provide technical and advisory assistance to their borrowers and conduct extensive research on development issues. In addition to these *public procurement* opportunities, in which multilateral financing is delivered to a national government for the implementation of a project or program, IFIs are increasingly lending directly to non-sovereign guaranteed (NSG) actors. These include sub-national government entities, as well as the private sector.” (Greeninvest, 2020)

5.2 Working with IFIs

The platform Greeninvest (2020) gives some of the common features of IFI procurement and how the process is organised, including: country strategies, the project cycle and the procurement process.

EU emphasises regional cooperation, and supports IFI’s recent emphasis on regional cooperation.

5.3 The IFI project cycle in general

When considering the need for IFI investment, it is important to understand conditions and requirements related to borrowing, including, but not limited to the following:

- maximum loans available
- loan maturity and payback period
- loan guarantee needed, sovereign or non-sovereign
- availability of concessional loans
- debt level counted for eligibility
- country policy on borrowing.

“The project cycle, which has similar stages for all IFIs, is the framework for the design, preparation, implementation, completion and evaluation of a project. Business opportunities occur throughout the cycle, so becoming familiar with it will increase chances of identifying an opportunity and securing a contract.” (Greeninvest, 2020)

6 Conclusions

Creating money efficiently and investing wisely is a concept of everyday life. In order to understand the development of the money and to be able to save it properly in the future, Section 1 described the main changes in the history of money. From the initial token money to today’s online banks differences were shown.

The best-known term is bartering, which was the first form of payment, with equivalent goods exchanged. Today, this type of payment is no longer a common term for us. Our purchases are shifting more and more into the virtual. The barter was followed by the first paper money. Probably, the still known bills will be replaced by the boom of online banking. This section showed how the money we know today emerged, and thus laid the foundation for Section 2, which explained how to successfully save money.

Various savings and investment forms were described. From the most popular savings account to equities and bonds, differences were presented and compared. The most common form is the savings account followed by building savings. The difference between savings account, ‘Bausparen’, shares and bonds are that you invest the savings account and ‘Bauspar’ account his money and invested in stocks and bonds his money. However, to be able to use such stocks and bonds, the last section showed how future trends in our financial market could change.

By making life online today, this section is also exploring online banking and warns against potential difficulties. In order to avoid complications, various forms of behaviour were also mentioned that could facilitate life on the net.

References

- Ahamer, G. (2004) ‘Negotiate your future: web based role play’, *Campus-Wide Information Systems*, Vol. 21, No. 1, pp.35–58.
- Ahamer, G. (2006) ‘Surfing global change: negotiating sustainable solutions’, *Simulation & Gaming – An International Journal*, Vol. 37, No. 3, pp.380–397, DOI: 10.1177/1046878106287772.
- Ahamer, G. (2008a) ‘Im Spiegelkabinett unterschiedlicher Entwicklungsvorstellungen’, *Journal für Entwicklungspolitik*, Vol. 24, No. 3, pp.56–76, DOI: 10.20446/JEP-2414-3197-24-3-56.
- Ahamer, G. (2008b) ‘Virtual Structures for mutual review promote understanding of opposed standpoints’, *The Turkish Online Journal of Distance Education (TOJDE)*, Vol. 9, No. 1, pp.17–43.
- Ahamer, G. (2012a) ‘“Surfing global change”: how didactic visions can be implemented’, *Campus-Wide Information Systems (CWIS)*, Vol. 22, No. 5, pp.298–319, ISSN: 1065-0741, DOI: 10.1108/10650740510632217.
- Ahamer, G. (2012b) ‘Training to bridge multicultural geographies of perspectives’, *Campus-Wide Information Systems*, Vol. 29, No. 1, pp.21–44, DOI: 10.1108/10650741211192037.
- Ahamer, G. (2013a) ‘Game, not fight: change climate change!’, *Simulation and Gaming – An International Journal*, Vol. 44, Nos. 2–3, pp.272–301, DOI: 10.1177/1046878112470541.

- Ahamer, G. (2013b) 'A planet-wide information system', *Campus-Wide Information Systems*, Vol. 30, No. 5, pp.369–378, DOI: 10.1108/CWIS-08-2013-0032,
- Ahamer, G. (2017) 'GIS^S and GIS^P facilitate higher education and cooperative learning design', in Geospatial Research – Concepts, Methodologies, Tools, and Applications, Mehdi Khosrow-Pour (Ed.): *Information Resources Management Association*, IGI Global Publishers, USA, Vol. II, Chapter 37, pp.810–833, DOI 10.4018/978-1-4666-9845-1.ch037.
- Ahamer, G. and Kumpfmüller, K.A. (2013) 'Education and literature for development in responsibility: partnership hedges globalization', *Handbook of Research on Transnational Higher Education*, pp.526–584, DOI: 10.4018/978-1-4666-4458-8.ch027.
- Anwalt (2018) *Cybercrime* [online] <https://www.anwalt.org/cyberkriminalitaet/> (accessed 16 February 2018)
- Austrian Value Added Tax Law (2019) *Umsatzsteuergesetz (UStG)* [online] <https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10004873> (accessed 14 October 2019).
- Bader, L., Bereuther, T., Deutsch, E., Edlinger, J., Füreder, S., Kaspar, E., Köttstorfer, M., Mautner, C., Rossegger, C., Samonig, A., Samonig, S., Schuster, C., Witz, G., Zotter, V. and Ahamer, G. (2013) 'Quality improvements in curricula for global studies', *Multicultural Education and Technologies Journal*, Vol. 7, Nos. 2/3, pp.113–126, DOI: 10.1108/17504971311328035.
- Bain & Co. Business Consulting (2019) [online] <http://www.bain.de/index.aspx> (accessed 10 December 2018).
- Bohrn, P., Samhaber, H. and Eglmayer, N. (2017) *Script. Commercial Investment Advice and Securities Brokerage. Asset Accumulation, Maintenance, Investment and Investment*, Vienna.
- Brettschneider, F. (2015) *A Study of the University of Stuttgart-Hohenheim* [online] https://komm.uni-hohenheim.de/publ_brettschneider (accessed 10 December 2018).
- Conserio (2017) *Savings* [online] <http://www.conserio.at/sparen/> (accessed 10 December 2017).
- Der Trend (2018) *Trend Stock Exchanges Outlook* [online] <https://www.trend.at/geld/boerse-ausblick-experte-rekorde-8559765> (accessed 14 February 2018).
- Duraković, E., Feigl, B., Fischer, B., Fleck, C., Galler, L-M., Heinrich, J., Kulmer, K., Kurzweil, B., Scholze, M., Sperl, R., Unterköfler, R., Matzenberger, J., Remele, K. and Ahamer, G. (2012) 'Dialogic global studies for multicultural technology assessment', *Multicultural Education and Technologies Journal*, Vol. 6, No. 4, pp.261–286, DOI: 10.1108/17504971211279527.
- Greeninvest (2020) *Regional Knowledge Centre* [online] <https://www.greeninvest-ca.eu/> (accessed 10 December 2018).
- IT-Wissen (2018) *Cybercrime* [online] <https://www.itwissen.info/robot-bot-Robot.html> (accessed 16 February 2018).
- Jung, A. and Pieper, D. (2010) *Money Makes History. Wars, Crises and the Rule of Capital Since the Middle Ages*, in Traub, R. (Ed.), Riebeck, Hamburg.
- Juraform (2018) *Erosion in Perfection* [online] <https://www.juraform.de/lexikon/boerse> (accessed 17 December 2018).
- Kluger, B. (2016) *The Standard* [online] <https://derstandard.at/> (accessed 17 January 2018).
- Loukota, W. and Wimpissinger, C. (2014) *Bitcoins – Tax Aspects*, Bitcoins, Vienna.
- Merk, G. (2017) *Recent Changes in Banking Procedures* [online] <http://www.gerhardmerk.de/veraenderung-der-bankgeschaefte-in-letzter-zeit> (accessed 25 December 2018).
- Müller, U., Ahamer, G., Peters, H., Weinke, E., Sapper, N. and Salcher, E. (2013) 'Technologies and collaborative education strengthen conviviality in rural communities in the Alps and in Senegal', *Multicultural Education and Technologies Journal (METJ)*, Vol. 7, Nos. 2/3, pp.207–227, DOI: 10.1108/17504971311328080.
- Neumann, J. (2017) *What is FinTech?* [online] <https://digitalgefesselt.de/> (accessed 5 December 2018).

- North, M. (2009) *Small History of Money. From the Middle Ages to Today*, Piper, Munich.
- Stock Exchange Dictionary* (2017) *Börsenlexikon* [online] <http://www.boersenlexikon.faz.net/investme> (accessed 2 December 2017).
- Strutzenberger, M. (2016) *The Cryptocurrency Bitcoin. History, Functionality, Safety and Economic Aspects*, GRIN Verlag, Berlin.
- Tiele, K. and Diehl, M. (2018) *Cryptocurrency Bitcoin* [online] <https://www.cesifo-group.de/DocDL/sd-2017-22-thiele-diehl-et-al-bitcoin-2017-11-23.pdf> (accessed 20 February 2018).
- Vienna Stock Exchange (2018) [online] <https://www.wienerbourse.at/> (accessed 15 February 2018).
- Werner, H. (2015) *History of Money*, Duncker and Humblot, Berlin.
- Ziegler, B. (2008) *History of Economic Thinking. Paradigm Shift in the Economy*, Piper, Munich.