

Electronic payment methods and their impact on the economies of leading countries in the world and the Arab world

MOHAND Saad*¹, HADJAB Moussa²,

¹ Laboratory of economic strategies and policies in Algeria,
saad.mohand@univ-msila.dz

² Mohamed Boudiaf University, M'sila, Algeria,
moussa.hadjab@univ-msila.dz

Received: 05/06/2024; Revised: 12/06/2024; Accepted: 04/07/2024

Abstract: This study aims at highlighting the evolution of electronic payment methods and their impact on the economies of countries. These tools have been able to spread rapidly. This is due to the great efforts exerted by the banks to attract as many customers as possible and make them test the effectiveness and advantages of these new means. These means are easy for the customer and even the banker. All payments, despite their advantages and high risks, have swept the financial sector for providing advanced and innovative financial and banking services, especially after the emergence of modern and innovative payment services by technology companies. Our study concluded that electronic payment methods and financial technology services have contributed significantly to the development of the economy of the country from an increase in GDP, reducing costs for governments and companies, and even reducing the time taken when customers complete financial transactions and revolutionize the system. Financial payment.

Keywords: Emerging firms; Encrypted currency; Financial technology; Non-cash economy; Payment card; Wallet smart phone.

Jel Classification Codes: L81 ; M38.

ملخص: تهدف هذه الدراسة إلى تسليط الضوء على تطور أساليب الدفع الإلكتروني وأثرها على اقتصادات البلدان. تمكنت هذه الأدوات من الانتشار بسرعة. ويرجع ذلك إلى الجهود الكبيرة التي تبذلها البنوك لجذب أكبر عدد ممكن من العملاء وجعلهم يختبرون فعالية ومزايا هذه الوسائل الجديدة. هذه الوسائل سهلة للعميل وحتى المصرفي. جميع المدفوعات، على الرغم من مزاياها ومخاطرها العالية، اجتاحت القطاع المالي لتقديم خدمات مالية ومصرفية متقدمة ومبتكرة، خلصت دراستنا إلى أن طرق الدفع الإلكتروني وخدمات التكنولوجيا المالية قد ساهمت بشكل كبير في تنمية اقتصاد البلد من زيادة الناتج المحلي الإجمالي، خفض التكاليف على الحكومات والشركات، بل وتقليل الوقت الذي يستغرقه العملاء في إتمام المعاملات المالية وإحداث ثورة في النظام. الدفع المالي.

الكلمات المفتاح: شركات ناشئة؛ عملة مشفرة؛ تكنولوجيا مالية؛ اقتصاد غير نقدي؛ بطاقة الدفع؛ محفظة الهاتف الذكي.

* Corresponding author, e-mail: saad.mohand@univ-msila.dz

I Introduction :

In the last decades of the twentieth century, many changes and transformations emerged resulting from the data of technological development. The accelerated pace of growth of technological innovations and technologies contributed to the transfer of societies over time to the information age, and led to the birth and emergence of many modern applications and activities, for which knowledge is considered the most important factor in their success.

E-commerce has become the dominant tone in the world today. It has contributed to making this world just a small village and a single market in which the opportunities granted to all companies of all sizes are equal to break into global markets and promote goods and commodities with ease, crossing all borders. The same is true for customers who are now able acquiring their needs with just the click of a button without having to leave their place.

The many advantages provided by the modern type of commercial exchanges that take place through an electronic medium have contributed to many countries' awareness of the importance of adopting electronic commerce and electronic payment. The need to realize this type of commerce is no longer an option. Rather, it has become an inevitable necessity, it imposes its presence on all countries, but the degree of development of this trade and electronic payment methods varies from one country to another. Many countries have responded to this type of exchange according to their circumstances and privacy, as although electronic commerce has reached high limits in its spread in Western countries and some Arab countries that have begun to progress important steps, although modest, but the adoption of this trade in the Arab countries is still in its early stages, and has not yet risen to that level that can be considered as an advanced technology for trade. Therefore, the economies of the Arab countries are exposed to a major disruption due to the lack of this trade. The Arab countries face many problems. Obstacles that prevent the expansion of the spread of e-commerce. However, casting this trade as misleading in many countries, including Algeria, and turning it into a tangible reality, confirmed that e-commerce has become an urgent necessity for this country, as electronic payment methods and systems have an effective role in increasing the volume of trade. Electronic technology plays an important role in developing the local production and marketing sectors, And providing broad opportunities to advance its economic growth and its contribution to foreign trade, and this requires the Arab countries to seek to maximize the benefit from this trade, develop electronic payment methods, and accelerate the process of moving towards it through the obstacles facing its application, and provide all the reasons for its success, including the requirements Technological infrastructure, electronic payment methods, and legislation related to their application.

a) The Problematic of the Study

What is the effect of employing financial technology methods on state economies.

b) Objectives of study:

1- Introducing electronic payment methods and financial technology in leading countries and Arab countries

2- The role of electronic payment means in the economies and future of this countries.

II THEORETICAL AND CONCEPTUAL FRAMEWORK

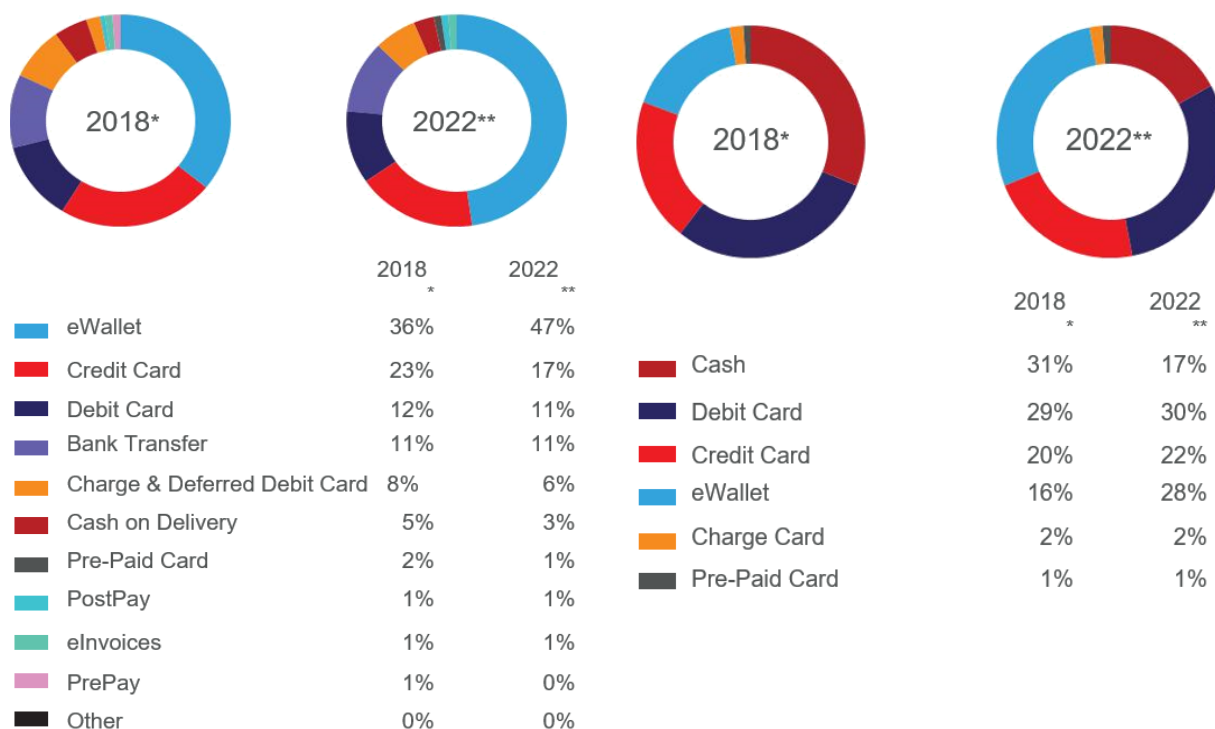
II.1. Diagnosing the reality of the use of electronic payment methods and financial technology globally

The Electronic payment methods are not only convenient (**sabie, moisa, & Stiphout, 2018**) but also help stimulate growth for economies, according to a Moody's Analytics study. The rapid spread of electronic payment methods in the past fifty years has changed the ways consumers pay for goods and services when purchasing, and how to manage... Traders do their business, reducing friction in the markets .

Where the global payment report of (**Jounas & Sundeep, 2018**)the World Pay Foundation for the year 2018 revealed global payment methods of the complex scene that is full of diversity in the

(electronic) payment methods and its height to meet the needs of consumers via the Internet, but the cash remains the leading payment method in the sales points, and this complex scene opens doors to increase satisfaction Customers by providing a suitable mixture of payment options, as credit cards and discount cards are now more than half the volume of e-commerce transactions. The poll, which was conducted on 36 countries, found at least 140 online payment methods under use today. The electronic portfolio has risen to the first place in the list of electronic payments and shows Figure 1 and 2 the following methods used in the global payment of 2018 to the year 2022.

Figure 1: Global payment methods at points of sale (marketplaces)




Source: Worldpay's Research Team, Global Payments Report, United States, WorldPay Company, November 2018, p 9.

The following can be explained: A. Cashless Payments: The popularity of cashless payments is rising globally. According to the latest report, the number of global cashless transactions reached 433.1 billion in 2015, mainly driven by strong growth in developing markets, and is expected to reach 725.8 billion by 2020. Thanks to China and India, emerging Asia should remain the fastest growing and has the potential to double its share. in global non-cash transactions to about 30% by 2020. However, the vast majority of transactions in Asia are in cash, indicating greater growth potential.

The Payments via credit cards: Among the global brand cards, those issued in the Asia Pacific region produced 102.5 billion purchase transactions in 2017 (**Oythers, October 2017**), which represents 34.68 % of the total world transactions from the phase. This strengthened the United States for the first time. The Asia Pacific region is expected to reach 54.03 % of the total worldwide by 2027, when purchase transactions are expected to increase by more than three times the ones that the United States generates to 476.56 billion. This includes payments based on the quick response icon made by mobile phones. The following table shows this.

Table 1: Growth of transactions for 2017 and projected for 2027 by credit card worldwide.



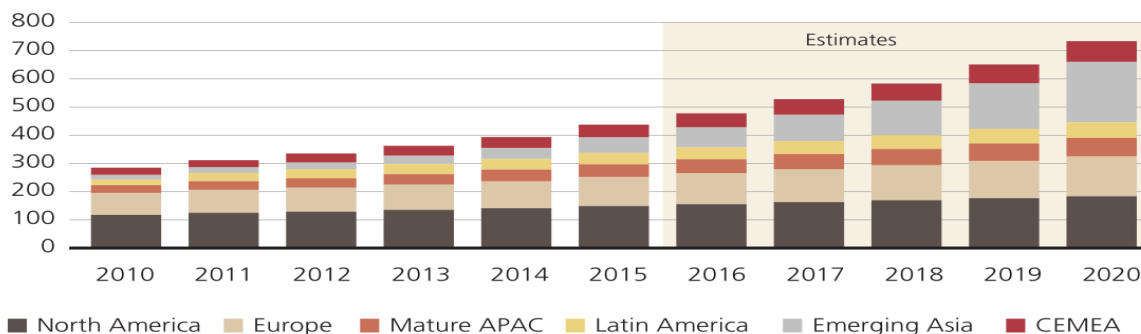
	U.S.	Canada	Latin America	Europe	MEA	Asia Pacific
2017 (bil.)	95.11	5.68	20.24	65.70	6.35	102.50
2027 (bil.)	153.62	12.94	46.29	160.76	31.91	476.56
10-yr. Change	+61.5%	+127.8%	+128.7%	+144.7%	+402.5%	+364.9%

Source: David Roberston, The Nilson Report, Carpinteria, issue 1145, January 2019, p 11.

From reading the previous table, we note that US cards registered 95.11 billion purchases in 2017, representing 32.18 percent of total purchases worldwide, their market share is reduced by 17.42% by 2027 so that the region is believed to be expected to grow to 153.62 billion.

The card issued in Europe issued 65.70 billion purchase transactions in 2017, or 22.23% of the global total. Europe’s share is expected to fall to 18.22% of the world average petroleum by 2027, so that the region is expected to reach 160.76 billion cards, or about another 7 billion in the United States. A card issued in Latin America produced 20.24 billion purchase transactions in 2017, a share of 6.85% of the world’s total. This ratio is expected to fall to 5.25 in 2027 and the transaction value is expected to reach 46.29 billion.

II.2. The reality of financial technology services worldwide in some pilot countries.



The FinnTech has a global presence. Globally, FinnTech users moved from the first users in our 2015 study to the early majority in 2017, in Sharon Shin’s Financial Technology Adoption Index, where 33% of the surveyed population indicated that they were regular users of FinTech services.

This indicates the extent to which FinnTech has grown and become acceptable to consumers. At the market level, FinnTech was adopted by an early majority of consumers (Erman, 2017).

It should be noted that FinTech has reached the majority of the backlog in two markets, indicating that more than half of the population are now regular users of financial technology services .

In the 2017 report, the five emerging markets indicate that FinTech consumer accreditation rates are much higher than the global average of 33%. Moreover, the adoption rate was 46% among these five

markets, compared with the average adoption rate of 28% for the remaining 15 markets and the global average

The main factor in such high adoption is that FinTech companies are superior to these literate but under-served people, with the five emerging markets characterized by rapidly expanding developing economies and middle class, but without traditional financial infrastructure to support demand.

There is a relatively large decrease in the population of current financial service providers, while lower prices for smart phones and broadband services have increased the digitally active population targeted by financial technology companies.

Figure 2: The economic cycle when electronic means of payment are available.



Source: Mark Zandi and others, The Impact of Electronic Payments on Economic Growth, U.S. America, Moody's Analytic, 2016, p 7

II.3 The role of electronic means of payment and financial technology in the economies of States and the future use of money.

The transition from banknote payments to digital payments can offer enormous direct advantages. For consumers, companies and governments, e-payments are generally highly appropriate, and they can save costs, employment and time for all parties. E-payments lead (Abdullah Alshamsi, 2019) to a virtuous economic cycle, where increased consumption increases production and employment, increases income and thus leads to stronger economic growth.

II.4 The role of electronic means of payment in the economics of Countries

The countries represent a large proportion of the world population and economic activity, with more than half of the world population living today in cities. By 2050, this number will rise to two thirds. At present, more than 80% of the world economic activity is taking place in cities. The vast majority of future economic growth is expected to come from cities.

II.5 The advantages for consumers.

Owing to the shortcomings of physical funds and the existence of digital technology everywhere, it is no wonder that consumers around the world are eager to pay electronically, digital trade is quadrupling the rate of traditional trade, and mobile (programme, 2017) trade is eight times higher, predicting a massive growth in mobile payments by Kayani Sonawane, which is expected to reach \$3.4 trillion globally by 2022.

The results of the survey by Robini Thought Lab of consumer opinion support this statement on average that about 11% of consumers expect to use material funds often less during 2019, 24% expect to use digital payments more, this trend towards consumer preference for digital payments is found across the 100 cities studied by the informant to extend to all consumer groups regardless of income and age.

The Consumers benefit greatly from digital transactions, such as reduced cheque fees, late payment charges for utilities and other daily charges, for example, the use of digital payments can help reduce the late charges paid by consumers on their monthly invoices.

According to research from the Citi Bank, 61% of United States consumers in arrears do so because of oblivion and 39%, because they are busy, so by paying bills electronically individuals can reduce the number of expensive late charges (Linkedin, 2018).

II.6. The Companies benefits

As with consumers, companies increasingly expect to move towards electronic payment forms and away from the use of securities and cheques, by moving to digital payments, companies achieve many benefits, including increased labour productivity, lower costs, reduced crime and a smooth customer experience and increased sales. The result is a higher average procurement amount and additional sales activity, specifically Robini ' s analysis of the net benefits of the 100 cities is estimated at \$312 billion, including lower net direct costs, significantly lower labor costs and an increase in sales, with a net average impact of about \$13,500 per million in revenue.

II.7 Reduced net direct costs of companies

Direct costs for accepting digital payments include the purchase or lease of terminals, electrical infrastructure and telecommunications to support them and transaction fees.

Over the 100 cities analysed, it was found that accepting money costs companies about 7 cents of each dollar they receive, compared to 5 cents of every dollar they collect from digital sources, a 28% reduction in cost

II.8. Increasing the sales

When firms begin to accept digital payments, their revenues increase by 17% on average and, in general, as the size of the company increases, the amount of momentum they receive from the use of digital payments has increased, although the gains from digital payments vary according to the nature of the company work, but they are a clear indication not only of sales, and they provide companies with enhanced data to better understand their customer base and market their products effectively, build up loyalty programs and create targeted incentives, etc. Since firms are at the stages of digital transformation, for example, they earn higher revenues, with companies in the early stages of digital transformation experiencing a 7% increase in sales compared to 24% of very digitally advanced firms.

II.9. Advantages for Governments

The transition from cash increases tax revenues in two ways: Higher corporate revenue from payments Digital and increasing the tax base of a smaller informal economy.

On average, The Governments can expect to provide approximately \$710 million per year in administrative costs through increased use of digital payments, and crime reduction can result in an average additional amount of \$53 million per year. At the same time, the potential increase in tax revenue amounts to an average of \$534 million per year, the net benefits to the Government could rise by a percentage of GDP in cities based on cash and cities that are digitally transformed to 1.20 per cent, while digitally mature cities and digitally advanced cities could rise to 0.6 per cent and 0.7 per cent, respectively (other, 2018).

II.10. GDP growth

There is steady growth in GDP growth, and the average annual GDP growth rate across all cities can increase by about 20 basis points, with the impact ranging from an average of 19 points for cash-dependent cities to 27 points for digitally leading cities, which means that the average GDP per city is \$119 billion over 15 years, and cash-based cities can see an average of \$54 billion in GDP, while digitally leading cities can see \$198 billion.

III. Conclusion

In this research paper, a set of statistics and data showed the extent of the impact of electronic payment and financial technology on the economies of leading countries and some Arab countries, as we concluded that these modern means covered many defects and deficiencies that traditional payment methods were suffering from draining time And the effort and the high costs of its treatment, and also its impact on the economic growth of the country, as it has become a heavy burden on banks and customers, as we touched on this chapter on the importance of the issue of financial technology, especially for the economies of the Middle East and North Africa countries, the latter that is fragile and the inability to keep pace with openness Economic.

IV. References

- 1 Abdullah Alshamsi, P. A. (2019, February). User perception of Bitcoin Usability and security across Novice users. *International journal of Human computer studies*, p. 122.
- Erman, C. (2017). Financial Technologies Effet on finacial Services from an open innovation perspective. Finland, University of Technology L'appeenranta, Finland.
- Jounas, D., & Sundeep, G. (2018). *The Road to cashless societies*. UBS Swizerlznd.
- Linkedin, C. (2018). *Word Fintech Report*. Paris.
- other, D. B. (2018). *Future of Fintech*. London.
- Oyhers, J. C. (October 2017). *Future of Payments*. London: Raconteur.
- programme, G. '. (2017). *Report on Mobile Money*. United Kingdom.
- sabie, A., moisa, B., & Stiphout, M. v. (2018). *Payement methouds report*. Netherlands: The paypers.