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Law and Islamic finance: How legal origins affect Islamic finance development?

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Abstract

Many researchers have shown that differences in legal origin explain differences in financial development. Using historical comparisons and cross-country regressions for 30 countries observed for the period from 2005 to 2010, this study tried to assess if different legal origins impacted on the development of Islamic finance. More particularly, this paper tried to assess empirically why and how Shari'a Law's legal origins adopted wholly or partially (combined with Common or Civil Law) could explain the level of development of Islamic finance in different jurisdictions. Firstly, we found that countries adopting a Shari'a legal system had a very well developed Islamic financial system. Secondly, we found that countries, adopting a mixed legal system based on Common Law and Shari'a Law, were characterized by the flexibility of their legal systems to make changes to their laws in response to the changing socioeconomic conditions and that these helped the development of the Islamic financial industry. However, we found that countries, adopting a mixed legal system based on both Civil Law and Shari'a Law, were less flexible in making changes to their old laws and this thwarted the development of the Islamic financial industry in these countries. Thirdly, we found that the concentration of Muslim population (the percentage of Muslim population) had a positive effect on the development of the Islamic banking system. Also, the level of income had a positive and significant effect on the development of Islamic banking.

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JEL classification: G2; K2; K4; O16; P5

1. Introduction

Over the last decade, the emergence of a considerably body of research on law and finance suggested that cross-country differences in legal origins could explain cross-country differences in financial development. One of the important factors, which could explain the financial development, was the

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flexibility of laws to evolve following the emergence of the new socioeconomic circumstances (Beck, Demirguc-Kunt, & Levine, 2003). The law's flexibility emphasized the formalism of laws and the ability of legal traditions to change. Particularly, legal systems, which adapt their effectiveness to the contracting needs of the economy, promote the development of the financial system. Whilst considerable research examined the effect of the legal system on financial development by concentrating on the effect of the origins of Civil and Common Law, few pieces of research attempted to study the effects of the legal system and especially Shari'a Law on the development of the Islamic financial system. Even if these researches

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existed, these studies remained theoretical and no empirical research had attempted to test empirically the *Theory of Law* and *Finance* in the context of Islamic finance.

Nowadays, Islamic financial institutions operate worldwide (Imam & Kpodar, 2013). Being different from conventional finance, Islamic finance and the activities of Islamic financial institutions must be based on Shari'a Law. This is why the legal environment, on which Islamic financial institutions operate, can have a direct effect on the Islamic finance industry's level of development.

The worldwide different stages of development of Islamic finance drew our attention to investigating the legal origin's effect on Islamic financial development. In fact, a legal environment, which accommodates effectively the intricacies of the Islamic financial industry and facilitates its development, is crucial not only in taking the industry forward but, also, more importantly in ensuring its soundness and stability.

This paper attempts to study empirically the theory of law and finance in the Islamic finance context. More particularly, this research attempted to assess empirically why and how differences in legal system could influence the stage of development of Islamic finance. We based this study not only on making comparisons between the effects of Common and Civil Law but, also, we extended our investigation on how the origins of Shari'a legal system, adopted wholly or combined with other legal origins (specially the Civil Law and Common Law), affected the development of the Islamic finance in the concerned jurisdictions.

In order to evaluate empirically the Law and theory of financial development in the context of Islamic finance, we used cross-country regression on a sample of 30 countries. Whilst controlling for other possible determinants, we examined whether cross-country differences in Islamic financial institutions accounted for cross-country differences in legal traditions. In order to measure Islamic financial development, we used the following measures: (i) Islamic banking assets/GPD; and (ii) Islamic banking assets/total banking assets. We measured Islamic financial development over the period from 2005 to 2010. In order to measure legal origin, we used data from the CIA Factbook specifying whether the country had Common Law/Civil Law/Shari'a Law/combined Shari'a Law/Civil Law or combined Shari'a Law/Common Law.

In conducting the cross-country comparison, we controlled for other potential determinants of Islamic financial development. Specifically, we included measures of religious composition, ethnic diversity and the year of independence since 1776.

We found that: firstly, Shari'a Law had a positive and a significant effect on Islamic banking development. Since the evidence was of countries adopting a legal system based on Shari'a Law and not influenced by western countries, the legal tradition (Common Law and Civil Law) might have little impact because of institutional hysteresis. Hence, the Islamic culture could be a powerful force leading to institutional changes in and, consequently, the development of Islamic finance in these countries.

Secondly, we found that mixed Civil Law/Shari'a Law had a negative effect on the development of Islamic banking

development. This outcome could be explained by the fact that Civil Law affected adversely the positive effect of Shari'a Law on Islamic banking development. In other words, countries, adopting a mixed legal system based on both Civil Law and Shari'a Law, were less flexible in making changes to their laws and in replacing old laws with new more flexible laws which met the contractual needs of Islamic finance and which promoted the development of the Islamic financial industry.

Thirdly, we found that countries, adopting a mixed legal system based on Common Law and Shari'a Law, were characterized by the flexibility of their legal system to make changes to their evolving laws in response to the changing socioeconomic conditions which helped the development of the Islamic financial industry.

Fourthly, we found that countries, adopting a combined legal system based on Civil Law/Common Law, had a less developed Islamic financial industry than other jurisdictions Also, these countries had weak infrastructures for Islamic financial systems.

Fifthly, we found that the concentration of the Muslim population (the percentage of Muslim population) had a positive effect on the development of Islamic banking. In addition, the level of income had a positive and a significant effect on the development of Islamic banking. Hence, rising income per capita tended to increase the number of Islamic banks in a country.

This paper contributes to the literature in several ways. Firstly, this is the first study trying to assess empirically how different legal origins impact on the development of Islamic finance, an area which continues to lag behind in the Islamic finance literature. Secondly, this paper goes much further by investigating how legal traditions shaped Islamic financial development, We did so by evaluating the robustness of the law and finance view by controlling for religion; ethnic diversity; and length of independence. This assessment seemed to be critical if we placed too much confidence in the theory of law and finance.

This paper is organized as follows. Section 2 discusses the literature review on law and finance and how Shari'a Law mattered to the development of the Islamic finance industry. Section 3 describes the data and methodology. Section 4 discusses the descriptive statistics. Section 5 discusses the regression results. Section 6 details our conclusion.

2. Literature review

Over the last decade, we observed the emergence of a large body of research discussing the legal origin's role of on financial development and how, in changing conditions, the adaptability of the legal system could explain the financial development. Adaptability of law means the aptitude of a legal system to change its way in satisfying the contracting needs of the new economic conditions which support the development of the financial system (Ahmed, 2006).

The law and finance theory argues that, over time, different countries' legal origins had influenced the evolution of their legal systems; this became a crucial determinant in analyzing economic growth in these countries. On the other hand, financial development was observed as a main driving force of economic growth (Graff, 2006). Hence, the legal system was recognized as one principal determinant of economic development. Accordingly, the causal chain proposed by this law and finance theory is:

Legal origin \rightarrow Legal system \rightarrow financial development \rightarrow economic growth.

Many researches attempted to assess empirically the link between the legal origin and financial development. Levine (1998, 1999) explained the effect of legal origin on financial development through economic growth in the long-run and suggested that legal origin impacted on the national financial systems which influenced the economic growth. Moreover, La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998, henceforth LLSV) demonstrated that whether a country commercial's law had British, French, German, or Scandinavian legal origins was critical to explaining the country's laws on creditor rights, shareholder rights, and private property rights. These explained the country's level of bank and stock market development.

Beck, Demirguc-Kunt, and Levine (2004) argued that one of the important factors, which could explain the development of the financial sector, was the legal system and the adaptability of laws to evolve following the emergence of new circumstances. Adaptability concerns the 'process of law making' and implies the ability of the laws to evolve in response to the changing socioeconomic conditions (Beck et al., 2004). Nevertheless, making changes to laws is usually slow and costly and results in the gap between an economy's financial needs and the assurance of efficient financing and financial development.

Moreover, Beck and Levine (2003) showed that cross-country differences in legal origin could explain cross-country differences in financial development. They clarified how the theory of law and finance could explain why: "some countries have well-developed growth-enhancing financial systems, while others do not", and why "some countries developed the necessary investor protection laws and contract-enforcement mechanisms to support financial institutions and markets, while others have not". According to them, the laws' ability to change depended on the legal origin of each country's legal system. Also, it depended on the flexibility of the legal system to accept, through litigation and jurisprudence, the replacement of an inefficient law by an efficient law.

North and Weingast (1989) argued that Britain institutions were better than France institutions. Hence, British colonies were expected to have better institutions than French colonies; this could affect the financial development of these previous colonies. Hence, legal origin can be a proxy for institutions and can be related to the legal system. In addition, Stulz and Williamson (2003) explained that legal origin could be proxies for religious and cultural differences which influenced financial development and differences in legal tradition. Per se, these did not help to explain the countries' levels of financial development. On the other hand, Beck et al. (2003) showed that, when controlling religious composition and

other national characteristics. Legal origin was linked to financial development.

La Porta (1997) argued that legal systems, based on Common Law, seemed to be more flexible in evolving and responding to changing financial conditions because, from time to time, rules could be replaced by new rules according to the doctrine of *stare decisis*. This change could not happen easily when the law was based on statutes and codes promulgated by the legislature under the Civil Law system in which laws and statutes could be adjusted only by the legislature, imposed on courts and introduced by a procedural formalism. Hence, in civil legal systems, the change of statutory law would be slow and costly.

2.1. How Shari'a legal origin can matter for Islamic finance development?

The issue of the flexibility of the legal system and the adaptability of the law to changing circumstances is crucial to the development of the Islamic financial system. The questions relating to dynamism, legal formalism, and the efficiency with which laws can adapt to changing circumstances is a crucial factor determining the level of Islamic financial sectors' development and growth (Ahmed, 2006).

After colonization, most Muslim countries adopted the legal systems of the colonizing countries (Common Law or Civil Law) whilst keeping some legislative instructions from the Shari'a Law. Generally, these adopted legal systems do not reflect the Islamic culture and the Islamic ideology. That is why, for a long time, the lack of strong legal infrastructure institutions in Muslim countries was considered to be a huge challenge for the development and the growth of Islamic finance.

In fact, from the beginning of Islamic finance, Islamic financial contracts were used; however, this was being done in an unfamiliar legal environment. Even if there was a general agreement to use Islamic contracts, the laws and courts might not be there to interpret and impose the form of these contracts (Ahmed, 2006). The development of Islamic finance along with contemporary financial transactions requires strong support from the legal system.

3. Data and methodology

3.1. Data

In this study, we used cross-country analyses to assess the empirical validity of the Origin Law and the growth of Islamic finance. We started with a first sample of 40 countries with different legal origins: Civil Law; Common Law; Shari'a Law; mixed Civil Law/Shari'a Law; mixed Common Law/Shari'a Law; and mixed Shari'a Law/Civil Law/Common Law origins (see Table 1). Due to data limitations on the growth of Islamic finance, we reduced the sample to 30 countries in some of the regression.

In order to assess the impact of the legal origin on the financial development, we needed indicators of financial

Table 1
Countries characteristics

Country	Primary language	Primary religion	Muslim	Others	Legal origin
Algeria	Arabic	Islam	0.99	0.01	Mixed Civil Law/Islamic Law
Bahrain	Arabic	Islam	0.82	0.18	Mixed Common Law/Islamic Law
Egypt	Arabic	Islam	0.9	0.1	Mixed Civil Law/Islamic Law
Iran	Persian	Islam	0.98	0.02	Shari'a Law
Jordan	Arabic	Islam	0.92	0.08	Mixed Civil Law/Islamic Law
Kuwait	Arabic	Islam	0.85	0.15	Mixed Common Law/Islamic Law
Morocco	Arabic	Islam	0.99	0.01	Mixed Civil Law/Islamic Law
Qatar	Arabic	Islam	0.775	0.099	Mixed Civil Law/Islamic Law
Saudi Arabia	Arabic	Islam	1	0	Shari'a Law
Syrian	Arabic	Islam	0.74	0.26	Mixed Civil Law/Islamic Law
Tunisia	Arabic	Islam	0.98	0.02	Mixed Civil Law/Islamic Law
UAE	Arabic	Islam	0.96	0.04	Mixed Civil Law/Islamic Law
Yemen	Arabic	Islam	0.99	0.01	Mixed Common Law/Islamic Law
Brunei	Malay	Islam	0.67	0.33	Mixed Civil Law/Islamic Law
Indonesia	Bahasa	Islam	0.86	0.109	Mixed Civil Law/Islamic Law
Iraq	Arabic	Islam	0.97	0.03	Mixed Civil Law/Islamic Law
Kazakhstan	Kazakh	Islam	0.47	0.43	Civil Law
Malaysia	Bahasa	Islam	0.604	0.395	Mixed Common Law/Islamic Law
Pakistan	Urdu	Islam	0.95	0.05	Mixed Common Law/Islamic Law
South Africa	Many languages	Christian	0.015	0.985	Mixed Common Law/Civil Law
Sri Lanka	Sinhala	Buddhist	0.067	0.924	Mixed Common Law/Civil Law
Sudan	Arabic	Islam	0.99	0.01	Mixed Common Law/Islamic Law
Tanzania	Kiswahili or Swahili		0.35	0.65	Common Law
Thailand	Thai	Buddhist	0.046	0.954	Civil Law
Turkey	Turkish	Islam	0.998	0.02	Civil Law
UK	English	Christian	0.027	0.966	Common Law
Bangladesh	Bangla	Islam	0.89	0.11	Mixed Common Law/Islamic Law
Lebanon	Arabic	Muslim	0.6	0.4	Mixed Civil Law/Religious Law

The primary language, primary religion, and the origin of the legal system for each country in the sample.

The primary religion (language) of country is religion practiced (language spoken) by the largest fraction of the population. The data on religion and language are obtained from 2011 CIA World Factbook. The percentage values for religion are from Pew Research Center (2011). Data from "The Future of the global Muslim population" (2011), Pew Research center. The Legal Origin variables are obtained from CIA World Factbook (2011).

development, legal origin and other determinants of the development of Islamic banking. (Table 2)

3.1.1. Financial development

In order to measure financial development, we used indicators of financial intermediary development. The objective of this paper is to proxy for the degree of national financial system to facilitate the development of the Islamic financial industry and to help to mobilize saving effectively in this industry. Because we did not have a direct measure to allow us to compare the ability of national financial systems to help the broad cross-section of countries to have these benefits, we used a variety of indicators of financial growth to assess the relationships between law and the development and the worldwide growth of Islamic finance.

ISLAMIC FINANCE GROWTH equaled Islamic financial assets (financial intermediary credit to the private sector) divided by Gross Domestic product (GDP) and measured over the period from 2005 to 2010. For most countries, this variable was unavailable. That is why we used hand collected data for this variable.

ISLAMIC FINANCE CONCENTRATION equaled Islamic banking assets divided by the total banking assets and averaged, also, over the period from 2005 to 2010. For our study of most countries, we hand collected this data.

3.1.2. Legal origin

In our analysis, we considered six legal families. Firstly, we considered the traditional families defined by La Porta et al. (1997, 1998). In fact, La Porta et al. (1997, 1998) classified the countries' legal origins in Common Law derived from British origin and Civil Law derived from French, German or Scandinavian countries. (i) The CIVIL LAW dummy variable equaled one if the country adopted its company/commercial law from the French, German or Scandinavian Civil Law and zero otherwise. (ii) The COMMON LAW dummy variable equaled one if the country adopted its company/commercial law from the British Common Law and zero otherwise.

Besides, and as an extension to La Porta et al.'s (1998, 1999) study, we used other data from the CIA FACTBOOK. (iii) The SHARI'A LAW dummy variable equaled one if the country adopted a pure Law from the Shari'a Law and zero otherwise. (iv) The MIXED CIVIL LAW/SHARI'A LAW dummy variable equaled one if the country adopted a mixed Law from the French Civil Law and Shari'a Law and zero otherwise. (v) The MIXED COMMON LAW/SHARIA LAW dummy variable equaled one if the country adopted a mixed Law from the French Civil Law and Shari'a Law and zero otherwise. (vi) CIVIL LAW/COMMON LAW, dummy variable equaled one if the country adopted Civil and Common Laws together and zero otherwise.

Table 2
Descriptive statistics.

Variable	OBS	Mean	Std. dev.	Min	Max
Islamic finance growth	119	0.19	0.26	0.00002	1.32
Islamic finance concentration	108	0.20	0.30	0.0007	1
Shari'a Law	164	0.07	0.26	0	1
Civil Law	164	0.10	0.30	0	1
Common Law	158	0.10	0.31	0	1
Civil Law/Shari'a Law	164	0.35	0.48	0	1
Common Law/Shari'a Law	164	0.26	0.44	0	1
Civil Law/Common Law	164	0.03	0.18	0	1
Income level	152	3.47	0.56	2.57	4.52
Religion (Islam)	154	0.85	0.34	0	1
Ethnic	157	0.34	0.24	0.019	0.74
Independence	153	0.189	0.39	0	1

Islamic Finance Growth: equals Islamic financial assets divided by Gross Domestic product (GDP), Islamic Finance Concentration: equals to Islamic banking assets divided by total banking assets, CIVIL LAW: dummy variable equals one if the country adopted its company/commercial law from the French, German or Scandinavian Civil Law and zero otherwise; COMMON LAW: dummy variable equals one if the country adopted its company/commercial law from the British Common Law and zero otherwise; SHARI'A LAW: dummy variable equals one if the country adopted a pure Law from the Shari'a Law and zero otherwise, MIXED CIVIL LAW/SHARI'A LAW: dummy variable equals one if the country adopted a mixed Law from the French Civil Law and Shari'a Law and zero otherwise; MIXED COMMON LAW/SHARIA LAW: dummy variable equals one if the country adopted a mixed Law from the French Civil Law and Shari'a Law and zero otherwise; CIVIL LAW/COMMON LAW: dummy variable equals one if the country adopted Civil and Common Laws together and zero otherwise; INCOME LEVEL: the logarithm of the real GDP per capita in US dollars; RELIGION: dummy variable equals one if the country's primary religion is Islam and zero otherwise; ETHNIC FRACTIONALIZATION: it measures the probability that two randomly selected individuals from a given country will not belong to the some ethnic group; INDEPENDENCE: equals the fraction of years since 1776 that a country has been independent.

3.1.3. Other possible determinants of the development of Islamic banking

In order to assess the robustness of our results, we included, in our empirical analysis, several other potential determinants of Islamic financial development. (i) INCOME LEVEL, we found that Real income was correlated greatly with the development of Islamic banking. We used the logarithm of the real GDP per capita in US dollars to measure the income level. (ii) **RELIGION** dummy variable equaled one if Islam was the country's primary religion and zero otherwise. In fact, the higher the country's percentage of Muslims there was faster development of Islamic banks. (iii) ETHNIC FRACTIONALIZA-TION is an indicator of ethnic diversity, it measures the probability that two randomly selected individuals from a given country will not belong to the some ethnic group. La Porta et al. (1999) argued that ethnic diversity led to corruption and low efficiency in governments that expropriated the ethnic losers. When we applied this view to the financial sector, the implication was that greater ethnic diversity implied the adoption of policies and institutions focused on maintaining power and control, rather than on creating an open and competitive financial system, (iv) INDEPENDENCE equaled the fraction of years since 1776 that a country was independent. We included this variable since a longer period of independence might provide greater opportunities for countries to develop institutions, policies, and regulations independent of their colonial heritage.

3.2. Econometric methodology

We used the following to estimate the model:

$$Y_i = \alpha_i + \beta_1 X_i + \beta_2 Z_i + \mu_i$$
 For $i = 1, 2, ...N$

where we defined Y_i , the dependent variable, by referring to: (i) Islamic assets to total assets ratio and (ii) Islamic assets to GDP ratio X_i was a matrix of legal origin variables made up of Shari'a Law, Civil Law, Common Law, Civil Law/Shari'a Law, Common Law/Shari'a Law, Civil Law/Common Law. Z_i was a matrix of control variables (INCOME LEVEL, RELIGION, ETHNIC FRACTIONALIZATION, and INDEPENDENECE). α_i was the unobserved country specific fixed effect, and μ_i was the error term for each observation. We estimated regressions by using Ordinary Least Squares (OLS).

4. Descriptive statistics

4.1. The worldwide development of the Islamic finance

Over the last decade, Islamic finance has known a strong growth and an increasing presence worldwide. Nowadays, Islamic finance is emerging worldwide as an alternative source of finance. By the end of 2011, the global market for Islamic financial services was estimated to be USD 1.1 Trillion (The Banker Survey, 2010).

Islamic finance is more developed in countries characterized by the large presence of Muslim populations. In fact, as at the end of 2011, the Islamic financial assets in OIC countries was estimated to be around 98% of global Shari'a assets and the MENA region held the greatest part of this share, around 79%. The GCC countries accounted for more than 40% of total Shari'a assets with, since 2006, an average compounded growth rate of 27.7%. On the other hand; even with the large presence of Muslim populations in Asian countries, Islamic finance was underrepresented greatly in the region and accounted for a small share of around 15% of the Islamic financial market. This indicated the need to develop the Islamic financial industry and the great potential to develop this industry in the region (SESRIC, 2012)¹.

Moreover, the share of Islamic finance assets in non-Muslim regions such as Australia, Europe and America did not exceed 2% in the global Islamic financial market. Despite

¹ The Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC), was founded as a subsidiary organ of the Organisation of Islamic Cooperation (OIC). The Centre started its activities in Ankara on 1 June 1978. The mains purpose of SESRIC are threefold: (i) collate, process and disseminate socio-economic statistics and information on and for the utilization of the member countries, (ii) study and evaluate the economic and social developments in the member countries to help generate proposals that will initiate and enhance co-operation among them, and (iii) organize training programmes in selected fields geared to the needs of the member countries as well as to the general objectives of the OIC.

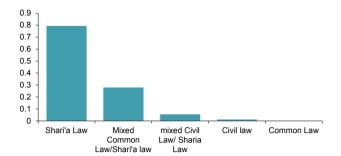


Fig. 1. Average Islamic assets/Total bank assets for the period 2005-2010.

that, these regions looked to emerge as new hubs for Islamic finance. According to the SESRIC (2012) the average growth of Islamic financial assets in these regions is 21.6% and more than doubled during the period from 2006 to 2011, indicating the huge potential to develop Islamic finance in these regions.

Nowadays, Sub-Saharan Africa countries (SSA) such as Nigeria, South Africa, and Tanzania have taken their first steps to develop an internal Islamic financial market; this represents an interesting source of funding for large scale infrastructure development projects (SESRIC, 2012).

4.2. The growth and legal origin of Islamic finance

Figs. 1 and 2 show clearly that, compared to countries with a French Civil Law origin or mixed Shari'a/Civil Law, Islamic financial growth is substantially higher in countries with a Shariah Law tradition and mixed Common/Shariah Law origin. When compared to Shari'a Law countries or mixed Shariah Law/Common Law countries, Civil Law countries and mixed Civil Law/Shari'a Law countries have, on average, a lower level of Islamic assets/GDP ratio and Islamic assets concentrations. Table 3, the correlations matrix, confirms Figs. 1 and 2 that there is a significant negative correlation between French Legal Law and mixed Shari'a Law/Civil Law dummy variables and Islamic financial growth.

5. Results

This section presents the results from regressions to assess the importance of legal families in explaining cross-country variances in Islamic financial development.

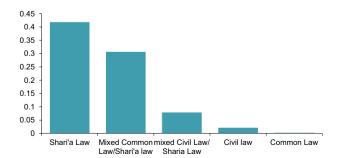


Fig. 2. Average Islamic assets/GDP ratio for the period 2005-2010.

Table 4 shows how the Islamic Assets to GDP ratio differ according to legal families. In the first column of Table 4, we present the results when we introduced Shari'a Law as an indicator of legal families. Our findings confirmed the theoretical expectations. In fact, Shari'a Law had a positive and a significant effect on the development of Islamic banking. This outcome can be explained by the fact that Shari'a Law is the principle source of Islamic finance and, hence, governments, adopting Shari'a legal system, are more interested in developing the Islamic finance industry.

In order to investigate the effect of the traditional legal families on Islamic banking, we introduced the Civil Law and Common Law variables respectively in the second and third columns of Table 4. As with the conventional banking, the results indicated that, whilst there was a strong negative relationship between civil legal origin and Islamic banking development, the Common Law variable had a positive and a significant effect on the development of Islamic banking. These outcomes were consistent with the LLSV (1998) view that countries, where legal rules originated in the Common-Law tradition, tended to protect investors considerably better than the Civil Law countries and, especially, in those countries with the French Civil Law tradition. Law enforcement was strong, also, in Common Law countries whereas it was at its weakest in the French Civil Law countries. Therefore, on average, the civil legal origin countries, had a substantially lower level of financial development than found in the Common Law countries.

We based our study not only on making comparisons between the effect of Common, Civil and Shari'a Law but, also, we extended our investigation on how mixed law (Civil Law/ Islamic Law, Common Law/Islamic Law, Civil Law/Common Law) could affect the development of Islamic finance in these jurisdictions. Therefore, in the column (4) of Table 4 we introduced our first mixed legal family which was Civil Law/ Shari'a Law. The results indicated that Civil Law/Shari'a Law had a negative effect on the development of Islamic banking. This outcome could be explained by the fact that Civil Law affected adversely the positive effect of Shari'a Law on the development of Islamic banking. In column (5), we introduced the Common Law/Shari'a Law as an indicator of mixed legal families. Our findings showed that whilst the Common Law/ Shari'a Law did not appear to be a significant determinant the Islamic Assets to GDP ratio, the positive sign confirmed the theoretical expectation that Common Law affected favorably the positive effect of Shari'a Law on the development of Islamic banking.

Finally, in column (6), we introduced the mixed Civil Law/Common Law variable. Our findings indicated that the Civil Law/Common Law variable had a strong negative effect on the development of Islamic banking. In countries with mixed law (Civil Law/Common Law), this result indicated that, as regards the development of Islamic banking, the negative effect of Civil Law dominated over the positive effect of Common Law. In fact, Civil Law hampered the positive effect of Common Law on the development of Islamic banking.

Table 3
Correlation matrix.

^a significant at 10%.

Correlation materix												
_	finance	Islamic finance concentration	Shari'a Law	Civil Law	Common Law	Civil Law/ Shari'a Law	Common Law/Shari'a Law		Income level	Religion (Islam)	Ethnic	Independence
Islamic Finance Growth	1											
Islamic Finance	0.38^{a}	1										
Concentration												
Shari'a Law	0.30^{a}	0.56^{a}	1									
Civil Law	-0.21^{a}	-0.19^{a}	-0.09^{a}	1								
Common Law	0.01^{a}	0.50^{a}	-0.09	-0.12^{a}	1							
Civil Law/Shari'a Law	-0.31^{a}	-0.43^{a}	-0.21^{a}	-0.25^{a}	-0.24^{a}	1						
Common Law/Shari'a Law	0.40^{a}	0.03	-0.16^{a}	-0.20^{a}	-0.21^{a}	-0.44^{a}	1					
Civil Law/Common Law	-0.16^{a}	-0.01^{a}	-0.05	-0.06	-0.06^{a}	-0.14^{a}	-0.11	1				
Income Level	0.30^{a}	-0.07	0.09	-0.14^{a}	-0.01	-0.28^{a}	0.42^{a}	0.03	1			
Religion (Islam)	0.20^{a}	0.22^{a}	0.11^{a}	-0.49^{a}	-0.20^{a}	0.08	0.24^{a}	0.07^{a}	0.01	1		
Ethnic	0.25^{a}	0.23 ^a	0.04^{a}	-0.05^{a}	0.063^{a}	-0.49^{a}	0.55 ^a	-0.007^{a}	0.35^{a}	0.04^{a}	1	
Independence	-0.12	0.19^{a}	0.23^{a}	0.41^{a}	0.14^{a}	-0.35^{a}	-0.04^{a}	-0.09^{a}	-0.30^{a}	-0.30^{a}	0.24^{a}	1

Islamic Finance Growth: equals Islamic financial assets divided by Gross Domestic product (GDP), Islamic Finance Concentration: equals to Islamic banking assets divided by total banking assets, CIVIL LAW: dummy variable equals one if the country adopted its company/commercial law from the French, German or Scandinavian Civil Law and zero otherwise; COMMON LAW: dummy variable equals one if the country adopted its company/commercial law from the British Common Law and zero otherwise; SHARI'A LAW: dummy variable equals one if the country adopted a pure Law from the Shari'a Law and zero otherwise; MIXED CIVIL LAW/SHARI'A LAW: dummy variable equals one if the country adopted a mixed Law from the French Civil Law and Shari'a Law and zero otherwise; MIXED COMMON LAW/SHARIA LAW: dummy variable equals one if the country adopted a mixed Law from the French Civil Law and Shari'a Law and zero otherwise; CIVIL LAW/COMMON LAW: dummy variable equals one if the country adopted Civil and Common Laws together and zero otherwise; INCOME LEVEL: the logarithm of the real GDP per capita in US dollars; RELIGION: dummy variable equals one if the country's primary religion is Islam and zero otherwise; ETHNIC FRACTIONALIZATION: it measures the probability that two randomly selected individuals from a given country will not belong to the some ethnic group; INDEPENDENCE: equals the fraction of years since 1776 that a country has been independent.

For the robustness of our results, we considered the ratio of Islamic assets to total assets ratio to be an indicator of the development of Islamic banking. Table 5 presents the results of estimation using Islamic assets to total assets as the dependent variable. In terms of significance the six legal families display qualitatively the same results as those of the regressions with Islamic assets to GDP ratio. In fact, whilst Shari'a Law, Common Law and mixed Shari'a Law/Common Law had a strong positive effect on Islamic assets to total assets ratio, Civil Law/Common Law had a negative effect on the Islamic assets to total assets ratio.

Looking to our control variables our mains findings showed that the variable, Islam, had a positive and significant effect on the development of Islamic banking as did the level of income. As with conventional banking, increasing income per capita tended to increase the number of Islamic banks in a country. We found the effects of Ethnic fractionalization and independence to be ambiguous. In fact, in some regressions, whilst they appeared to have a positive and a significant effect on the development of Islamic banking, they had, in other regressions, a significantly negative effect on Islamic banking.

6. Conclusion

This paper assessed the theory of finance regarding the historical determinants of financial development in the context of Islamic finance. According to Beck et al. (2003) "The law and financial theory argue that historically determined differences in legal origin can explain cross-country differences in

financial development observed today. Specially, the Law and finance theory predicts that countries that inherited the British common law tradition obtained a legal tradition that tends to support financial development to a much greater degree than countries that obtained the French civil law tradition". In this paper, we tried to study the impact of the Shari'a Law adopted wholly as a legal system or partially (combined with Common or Civil Law) on the development of the Islamic financial industry.

Using a cross-country analysis for 30 countries observed over the period from 2005 to 2010, our research revealed several findings. Firstly, we found that Shari'a Law had a positive and a significant effect on the growth of Islamic banking since there was evidence that countries, like Iran, adopting a legal system based on Shari'a Law and not influenced by western legal traditions (Common Law and Civil Law), might have little impact because of institutional hysteresis. Hence, Islamic culture can be powerful force which leads to changes in institutions and, consequently, the development of Islamic finance in these countries.

Secondly, we found that mixed Civil Law/Shari'a Law has a negative effect on Islamic banking growth. This outcome could be explained by the fact that Civil Law affected adversely the positive effect of Shari'a Law on the development of Islamic banking. In other words, countries, adopting a mixed legal system based on both Civil Law and Shari'a Law, are less flexible in making changes in their laws and to replacing old laws with new more flexible laws associated with the contractual need of Islamic finance which promotes the development of the Islamic financial industry.

Table 4
Legal families and Islamic banking development.

Variables	Y = Islamic assets to GDP ratio								
	(1)	(2)	(3)	(4)	(5)	(6)			
Shari'a Law	0.33*								
	(11.76)								
Civil Law	· ·	-0.14*							
		(-2.77)							
Common Law			0.14*						
			(2.77)						
Civil				-0.26*					
Law/Shari'a				(-3.67)					
Law									
Common					0.06				
Law/Shari'a					(0.57)				
Law									
Civil						-0.22*			
Law/Common						(-8.66)			
Law									
Income Level	0.17*	0.12*	0.12*	0.07***	0.11***	0.13*			
	(3.96)	(2.71)	(2.71)	(1.77)	(1.86)	(2.67)			
Religion (Islam)	0.03	0.19*	0.19*	0.20*	0.13**	0.14*			
	(0.86)	(3.13)	(3.13)	(4.17)	(2.61)	(3.01)			
Ethnic	0.23*	0.21*	0.21*	-0.09	0.14	0.21*			
	(3.92)	(2.80)	(2.80)	(-0.90)	(0.92)	(2.66)			
Independence	-0.26*	-0.08	-0.08	-0.20**	-0.13	-0.16**			
	(-4.04)	(-1.12)	(-1.12)	(-2.51)	(-1.39)	(-1.97)			
Cst	-0.48*	-0.40**	-0.40**	-0.04	-0.34	-0.41**			
	(-3.54)	(-2.47)	(-2.47)	(-0.29)	(-1.62)	(-2.49)			
\mathbb{R}^2	0.37	0.25	0.25	0.27	0.27	0.23			

T-statistics for the coefficient are in parenthesis.

Islamic Finance Growth: equals Islamic financial assets divided by Gross Domestic product (GDP), Islamic Finance Concentration: equals to Islamic banking assets divided by total banking assets, CIVIL LAW: dummy variable equals one if the country adopted its company/commercial law from the French, German or Scandinavian Civil Law and zero otherwise: COMMON LAW: dummy variable equals one if the country adopted its company/commercial law from the British Common Law and zero otherwise; SHARI'A LAW: dummy variable equals one if the country adopted a pure Law from the Shari'a Law and zero otherwise, MIXED CIVIL LAW/SHARI'A LAW: dummy variable equals one if the country adopted a mixed Law from the French Civil Law and Shari'a Law and zero otherwise; MIXED COMMON LAW/SHARIA LAW: dummy variable equals one if the country adopted a mixed Law from the French Civil Law and Shari'a Law and zero otherwise: CIVIL LAW/COMMON LAW: dummy variable equals one if the country adopted Civil and Common Laws together and zero otherwise; INCOME **LEVEL**: the logarithm of the real GDP per capita in US dollars; **RELIGION**: dummy variable equals one if the country's primary religion is Islam and zero otherwise; ETHNIC FRACTIONALIZATION: it measures the probability that two randomly selected individuals from a given country will not belong to the some ethnic group; INDEPENDENCE: equals the fraction of years since 1776 that a country has been independent.

Thirdly, we found that Common Law/Shari'a Law did not appear to be a significant determinant on the growth of Islamic finance; the positive sign confirmed the theoretical expectation that Common Law affected favorably the positive effect of Shari'a Law on the development of Islamic banking. Hence, countries, adopting a mixed legal system based on Common Law and Shari'a Law, were characterized by the flexibility of their legal system to make changes in their laws in response to the changing socioeconomic conditions and, therefore to develop the Islamic financial industry.

Table 5
Legal families and Islamic banking Growth.

	Y = Islamic assets to total assets ratio								
	(1)	(2)	(3)	(4)	(5)	(6)			
Shari'a Law	0.65*				-				
	(9.87)								
Civil Law		-0.16*	k						
		(-2.55)							
Common Law			0.16**						
			(2.55)						
Civil Law/Shari'a Law				-0.34*					
				(-4.44)					
Common Law/Shari'a Lav	v				0.20**				
					(2.08)				
Civil Law/Common Law						-0.02			
						(-0.50			
Income Level	-0.03	-0.10	-0.10	-0.19**	-0.06	-0.12			
	(-0.67)	(-1.42)	(-1.42)	(-2.55)	(-0.89)	(-1.58)			
Religion (Islam)	0.13*	0.23*	0.23*	0.19*	0.34*	0.28*			
-	(6.23)	(4.44)	(4.44)	(2.84)	(5.17)	(5.35)			
Ethnic	0.32*	0.32*	0.32*	-0.03	0.56*	0.34*			
	(5.31)	(2.95)	(2.95)	(-0.35)	(3.56)	(3.13)			
Independence	0.01	0.22*	0.22*	0.008	0.10	0.16			
	(0.24)	(2.35)	(2.35)	(0.07)	(1.21)	(1.65)			
Cst	-0.05	0.25	0.25	0.87*	-0.09	0.18			
	(-0.4)	(1.11)	(1.11)	(2.86)	(-0.40)	(0.82)			
R^2	0.73	0.27	0.27	0.31	0.27	0.28			

T-statistics for the coefficient are in parenthesis.

Islamic Finance Growth: equals Islamic financial assets divided by Gross Domestic product (GDP), Islamic Finance Concentration: equals to Islamic banking assets divided by total banking assets, CIVIL LAW: dummy variable equals one if the country adopted its company/commercial law from the French, German or Scandinavian Civil Law and zero otherwise; COMMON LAW: dummy variable equals one if the country adopted its company/commercial law from the British Common Law and zero otherwise: SHARI'A LAW: dummy variable equals one if the country adopted a pure Law from the Shari'a Law and zero otherwise, MIXED CIVIL LAW/ SHARI'A LAW: dummy variable equals one if the country adopted a mixed Law from the French Civil Law and Shari'a Law and zero otherwise; MIXED COMMON LAW/SHARIA LAW: dummy variable equals one if the country adopted a mixed Law from the French Civil Law and Shari'a Law and zero otherwise; CIVIL LAW/COMMON LAW: dummy variable equals one if the country adopted Civil and Common Laws together and zero otherwise; INCOME LEVEL: the logarithm of the real GDP per capita in US dollars; RELIGION: dummy variable equals one if the country's primary religion is Islam and zero otherwise; ETHNIC FRAC-TIONALIZATION: it measures the probability that two randomly selected individuals from a given country will not belong to the some ethnic group; INDEPENDENCE: equals the fraction of years since 1776 that a country has been independent.

Fourthly, we found that countries, adopting a combined legal system based on Civil Law/Common Law, had an undeveloped Islamic financial industry characterized by a weak infrastructure for the Islamic financial system.

Fifthly, we found that the concentration of Muslim population (the percentage of Muslim population) had a positive effect on the development of Islamic banking. In addition, the level of income had a positive and a significant effect on its development. As with conventional banking, increasing income per capita tended to increase the number of Islamic banks in a country.

^{*} significant at 1%,** significant at 5% and*** significant at 10%.

^{*} significant at 1%,** significant at 5% and *** significant at 10%.

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