

Direct and Indirect Costs in Islamic Finance – Opportunities for Research

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Abstract

This is an exploratory conceptual paper that attempts to highlight some potential research areas related to the aspects of direct and indirect costs in Islamic finance. Questions on whether indirect costs should be included in compensation calculation and in computing *mudarabah* profit, as well as the issue for indirect costs in the context of Islamic banking windows, are deliberated upon. The paper articulates a comparison of costs of Islamic banks vis-à-vis conventional banks in terms of cost of funds, general cost efficiencies, regulatory costs, asset-liability management and risk management costs, operational costs and costs of bad debt. The risk of non-*Shari'ah* compliance and how it may impact costs are also highlighted. Finally, the paper briefly discusses some cost aspects relevant to Islamic capital markets.

Definition of Direct and Indirect Costs

A direct cost is a price that can be directly attributed to the production of specific goods or provision of specific services. This direct cost can be traced to the stipulated cost object which may be a product, service or business division or department. Direct costs are typically variable costs, in that their quantum varies with level of production, although some fixed costs may be classified as direct costs (if their incurrence can be exclusively assigned to a single identified cost object).

Indirect costs are expenditures that cannot be directly associated with a particular cost object (product, service, function or project). Indirect costs can be either fixed or variable. The nature of these costs is that they are shared by two or more cost objects, and apportioning these costs between or among cost objects is not feasible, cumbersome or cannot be done cost-effectively. Examples include shared overheads and general administrative expenses.

In the context of finance, the primary direct cost is cost of funds. In banking, a commercial bank sources funds from depositors and from money markets, and interest paid to these providers of funds represents a direct cost. In providing loans or financing to their customers, commercial banks should reasonably expect some fraction of those receivables to be uncollectible or culminate in (written-off) bad debt. These can also be considered as direct costs. In addition, there are certain costs in complying with

regulatory requirements – such as statutory reserve requirements (portion of sourced funds that cannot be loaned out or disbursed) and capital adequacy requirements (costs of maintaining prudent levels of capital). Also, commercial banks typically maintain an adequate level of liquid assets to meet daily operational demands. These do not earn a return to the bank and hence is also a (direct) cost to the bank.

Indirect costs for a commercial bank are typically personnel costs (salaries, wages, allowances, bonuses, commissions, retirement benefit contributions, and other employee benefits) and overhead expenses (marketing and promotion, depreciation of fixed assets, information technology expenses, rental, security costs, insurance, utilities, office maintenance, and incidental expenses).

Direct and Indirect Costs in Islamic Banking

Articulating the idea of direct and indirect costs in contemporary Islamic banking produces an interesting observation. From a *Shari'ah*-compliance standpoint, the propagated idea is that Islamic banks are in the trading business. Islamic banks are said to purchase assets [for example, machinery under a *Murabahah* to the Purchase Orderer facility, or, crude palm oil under a Commodity *Murabahah* (*Tawarruq*) arrangement] which are subsequently sold to their customers under deferred payment terms at a pre-determined mark-up. Hence, direct cost here would be the price paid by the bank to acquire the asset in question (the machinery or crude palm oil, as in the example given). As per AAOIFI standards, the bank is allowed to include associated costs such as installation, transportation, storage and insurance. The bank's personnel costs are, however, not allowed to be included as the base cost (and presumably classified as indirect cost to the bank) [see AAOIFI *Shari'ah* Standard No. 8 *Murabahah* 4/4]. Similarly, Bank Negara Malaysia's *Shari'ah* parameters on *Murabahah* stipulate that indirect costs shall not be included as part of acquisition costs [see *Shari'ah* Advisory Council of Bank Negara Malaysia's *Shari'ah* Parameter Reference on *Murabahah* – Section 5, No. 29].

On the other hand, from a financial reporting viewpoint, contemporary Islamic banks are deemed to be essentially money-lenders. This can be seen in the manner of reporting in an Islamic bank's Profit and Loss Statement. "Income derived from investment of depositors' funds and from investment account funds" [comparable to "interest received" in conventional banks] are offset with "income attributable to depositors and investment account holders" [comparable to "interest paid" in conventional banks] to arrive at net income. Personnel and overheads are subsequently deducted as indirect costs. Thus essentially to the accounting profession, direct costs for an Islamic bank is cost of funds, and not cost of acquired assets subsequently sold on credit.

This dichotomy in treatment can be explained as follows. In order to secure *Shari'ah*-compliance sign-off by *Shari'ah* scholars, the idea that Islamic banks are buying and selling tangible (for the most part) assets is mooted, and this is evidenced by the use of sale contracts instead of loan contracts. *Shari'ah* scholars, the gatekeepers of contemporary Islamic finance, buy-in into this idea and pronounce that such documentary differentiation is sufficient to legitimize such practice from an Islamic legal perspective.

The accounting fraternity, on the other hand, has collectively adopted a different view. They presumably take into account a number of realities. Firstly, the assets are not acquired by the bank before-hand, meaning that the bank only purchases the asset in question after effectively securing the subsequent re-sale to the bank's customer. Secondly, the bank does not, in effect, assume any (non-trivial) risks of asset ownership. Thirdly, the quantum of mark-up typically culminates in financing rates which are comparable to conventional interest rates. For at least these reasons, and putting in operation the accounting principle of "substance over form", contemporary financial reporting of Islamic banks has taken the form of that for money-lenders, albeit of the Islamic variety.

Incorporation of Indirect Costs in Computing Compensation for Case of Payment Delinquency

The general view of contemporary scholars is that in the event of payment delinquency, the bank would be allowed to impose a penalty or compensation, save cases of genuine debtor insolvency. The matter of whether this said penalty or compensation is to be recognized as income or to be channelled to charity is a separate matter, subject to differing *Shari'ah* opinions. The bases for allowing such a practice of charges for cases of delayed or non-payment are to discourage intentional evasion of payment obligation by the debtor as well as to protect the interests and rights of the creditor.

Notwithstanding this, an issue of potential debate is, in computing the "compensation", wherein the actual cost borne by the bank in the provision of the financing facility in question is of paramount concern, should the bank be also allowed to include indirect costs? There are differing opinions here. While AAOIFI and a *fatwa* of Al-Rajhi Bank resolved that only direct costs can be considered, a *fatwa* of Dubai Islamic Bank allows for both direct and indirect costs (as cited by Mohd Noor and Haron, 2016). In the case of the latter, it was argued that the bank would incur the costs and would have an effect on the bank, regardless of whether they were direct or indirect in nature, and hence should be entitled to recover them. More in-depth research is arguably justified to ascertain the efficacy of both resolutions.

Indirect Costs in Islamic Banking Windows

Indirect costs such as personnel costs and shared overheads give rise to an issue in the case of conventional banks that offer Islamic banking products and services via Islamic banking "windows". It is conceivable that a significant portion of indirect costs are shared between a conventional bank's Islamic windows operation and the bank's conventional business. Some personnel may serve both Islamic and conventional banking clientele. A banking group's internal functions and services such as human resources, information technology, risk management and general administration, to name but a few, are typically shared between the bank's conventional business and its Islamic windows. They typically share physical resources like office buildings, office equipment and fittings, and information systems. It may not be feasible or cost-effective to apportion usage of these shared resources between the two facets of the group's business, purely for reporting purposes.

As such, it would not be practicable to ascertain the complete cost-picture for the Islamic windows operation for the bank in question (net of indirect costs). This represents a limitation to financial performance reporting for the bank's Islamic windows. At best, users of financial accounting information would have to settle for making a mental note of this and limit their analysis to net income before indirect costs (essentially focusing on "net interest margin"). Research on comparative cost efficiency of banks would have to be reminded of this constraint. At worst, non-inclusion of apportioned shared costs would result in under-reporting of costs for a given Islamic windows operation and produce inflated profitability and hence inaccurate performance assessments. Ignoring the Islamic window's fair share of overheads would be a form of subsidization of the Islamic banking business by the conventional bank.

This is not an issue for full-fledged Islamic banks nor is it relevant to banking groups that have set up a separate subsidiary for their Islamic banking business (as a separate set of accounts would be mandated hence apportionment of indirect costs would take place).

Indirect Costs in *Mudarabah*

The *Shari'ah* Advisory Council of Bank Negara Malaysia has resolved ¹ that indirect expenses such as overheads, staff salaries, depreciation of fixed assets, general administrative expenses and IT-related costs shall not be deducted from the *mudarabah* fund. In a sense, this means that only direct costs are to be taken into account in determining *mudarabah* profit that is subject to distribution between *rabbal mal* and *mudarib* (the depositor and the bank, respectively, in the case of *mudarabah* deposits) according to the pre-agreed profit sharing ratio. The rationale for this stance is that the bank-*mudarib* would factor in its indirect costs in negotiating the profit sharing ratio with the depositor-*rabbal mal* and that the bank would indirectly be recouping fair apportionment of related indirect costs from its received share of distributed profits. This approach is also said to avoid possibility of cost manipulation at the expense of the *rabbal mal*.

The alternative approach would have been to allow the deduction of indirect costs, according to a pre-agreed set of guidelines and stipulations. However, it was presumably felt that this would be more cumbersome to manage and potentially more susceptible to mismanagement or manipulation. There is some degree of information asymmetry between *rabbal mal* and *mudarib* and narrowing this gap can be costly and time-consuming. That said, one should also consider the possibility of over-compensation in the form of profit sharing ratios overly-favouring the bank-*mudarib* to provide for more room to recover indirect expenses. There is opportunity for research here to establish which between the two approaches results in a fairer and more cost-effective solution.

¹ During its 82nd meeting, dated 17 February 2009.

Banking Costs – Islamic Versus Conventional

Cost of funds

Some arguments can be made to moot the idea that Islamic banking cost of funds can be lower than that of its conventional counterpart, at least theoretically. Islamic deposits structured using loan-based contracts like *wadiah* and *qard* would be subjected to only discretionary *hibah* (gift) so as to avoid being construed as *riba*. A captive market of Muslim depositors can be said to tolerate little or no return on their deposits, on the belief that consistent return on deposits would be tantamount to *riba*. In addition, in certain markets, the government may make available to Islamic banks sources of funds at lower cost in a bid to promote Islamic banking. All these provide avenues for lower cost of funds for Islamic banks vis-à-vis conventional ones. There are of course offsetting considerations. The depositors of Islamic banks are made up of non-Muslims as well. Islamic banks face displaced commercial risk – the risk of withdrawal of funds by depositors – in the event that realized returns do not meet expectations.

Economies of scale

There is popular rhetoric that larger banks have superior economies of scale in being able to spread their fixed overheads over a larger asset and revenue base. Given that generally Islamic banks tend to be smaller than their conventional rivals, this would seem to imply that conventional banks achieve greater cost efficiencies compared to Islamic banks. However, there is empirical research which offers evidence that this may not necessarily be the case. Ariff *et al.* (2011) found that the cost efficiency differences between Islamic and conventional banks were not statistically discernible. The same can be said when comparisons were made between small and big banks.

Regulatory costs

It can be said that generally standards on capital adequacy requirements were designed with mainstream banking systems and infrastructure in mind. In this regard, Islamic banks are at times, unfairly penalized. Profit-and-risk sharing instruments like *mudarabah* and *musharakah* when employed as modes of financing are typically assigned significantly higher risk weights. The larger the risk-weighted assets, the more capital the Islamic bank needs to hold to comply with regulatory standards. This implies a comparatively higher regulatory cost.

Such a challenge stems from a mismatch in risk profiles in the intermediation equation. In a number of jurisdictions, *mudarabah*-based deposits carry explicit or implicit capital guarantees with assured (albeit non-contractual) positive returns. These deposits, when used to finance *mudarabah*-based financing, culminates in that aforementioned risk mismatch which in turn translates into the higher cost of maintaining additional regulatory capital. In response to this, Islamic banks typically abandon the idea of profit-and-risk sharing as a financing approach. Evidently, *mudarabah* and *musharakah* financing only make up token fractions of an Islamic bank's financing portfolio. Consequently, there is non-realization of the two-tier *mudarabah* model envisioned by early pioneers of Islamic finance.

Interestingly, if the idea of *mudarabah* was more genuinely applied to mobilize the Islamic bank's source of funds, such regulatory costs would be reduced if not totally disappear. If funds are sourced to be strictly risk capital from the point of view of "depositors", that is, no capital or return guarantees, when these funds are channelled to economic ventures that result in losses, the said losses "pass-through" the Islamic bank. In other words, such "depositors" ultimately and exclusively bear the risks of losses. Under such a scenario, the Islamic bank needs to hold no regulatory capital.

The new investment account – A game changer

This was presumably the motivation that led to the introduction of the new "investment account" gazetted by Malaysia's Islamic Financial Services Act (IFSA) 2013. These investment accounts now carry no capital guarantees (including no coverage under deposit *takaful* schemes). In a sense, with such investment accounts, the "cost of funds" would be higher, to compensate investment account holders who now bear much higher risks. However, it is important to note that this cost is not fixed ex ante. Nonetheless, such a cost would be offset by lower regulatory costs as well as lower asset-liability management (ALM) costs. In addition to earning a share of profits in the *mudarabah* scheme (as *mudarib*), the Islamic bank can also earn arranger fees (via the *wakalah* contract). This represents a major game change – with investment account holders now shouldering the bulk of investment risks and Islamic banks assuming the role of facilitator and executor. This is a relatively new development in the Islamic banking landscape and it remains to be seen how well the market is embracing the change. It should be noted however, that at present, much of the financing to economic ventures are contracted on the basis of fixed-return schemes (such as commodity *murabahah*) instead of profit-and-risk sharing arrangements like *mudarabah* and *musharakah*. Under this new scheme of things, the Islamic bank effectively transfers risk to investment account holders. Notwithstanding this, the Islamic bank still bears the risk of loss in reputation as well as the risk of potential litigation in the event of proven negligence or fraud, and these represent indirect costs to the Islamic bank albeit difficult to quantify.

Asset-Liability Management (ALM) and Risk management

At times, the banking business is a precarious balancing between its assets and liabilities. Banks often push their leverage to limits allowed by regulators to maximize return on equity. Such a business model exposes banks to obvious risks. In addition, banks also need to manage their liquidity to deal with daily cash flow movements while simultaneously maximizing returns. In this regard, Islamic banks are said to face the challenge of insufficient liquidity management instruments. The acceptability of some proposed instruments from a *Shari'ah* standpoint as well as the depth of markets, are some reasons attributing to this predicament. By and large, there is reluctance by *Shari'ah* scholars to sign off on contemporary financial derivative instruments. Thus, Islamic banks have to resort to more complicated financially-engineered solutions. These are customized over-the-counter negotiated arrangements which tend to be more costly to the bank. For example, the use of currency derivatives are common, to manage foreign currency exchange rate risk. Common instruments such as currency forwards, futures, options and swaps are generally deemed non-*Shari'ah* compliant as they entail the exchange of two *ribawi* items not on spot terms. As a workable alternative, some banks have engineered a synthetic currency forward contract using combinations of commodity *murabahah* transactions and unilateral binding promise (*wa'd*). Such a solution is not

only at least marginally more costly, it introduces more complexity. Opacity in transactions makes risk management more challenging and costly (to do comprehensively). One lesson that can be drawn from the 2008 Global Financial Crisis is to not underestimate, let alone ignore, the potential presence and impact of “unknown unknowns” or sometimes termed “risk risk”.

Additional operational costs

The fact that, contemporary Islamic finance has largely resorted to reverse engineering of conventional product offerings using commutative (exchange) contracts like sale and leasing, implies higher operational costs. Compared to similar mainstream-finance transactions, Islamic financial products typically involve more transactions and more transacting parties. All else being equal, this suggests higher operational costs. For example, the commodity *murabahah* (*tawarruq*) involves paying brokerage fees and charges to platforms like Bursa Suq Al-Sila'² and London Metals Exchange. Additional documentation also attracts added legal, administrative as well as auditing costs. It should be noted also that Islamic banks have to incur costs of financial engineering – paying product development consultants to construct instruments that would garner *Shari'ah* compliant status. Beyond that, Islamic banks have to maintain a remunerated *Shari'ah* board as well as sustain a *Shari'ah* department or unit in line with more stringent and demanding recent developments in the *Shari'ah* governance framework in some jurisdictions such as Malaysia.

Costs of bad debt

It would be interesting to dwell into the question of which – Islamic or conventional banks – would have higher costs of bad debt. On a theoretical plane, it could be argued that Islamic banks would be more forgiving – seeing that Islam advocates the giving of reprieve to those in difficulty. Whether Islamic banks are dealing with genuinely insolvent debtors or those simply wanting to exploit is a separate matter. There is a case to be made that Islamic banks may have to contend with higher rates of non-performing financing. On the other hand, the presence of religiosity could work in the Islamic bank's favour. Customers can be made to feel more inclined to honour contractual commitments using religious or moral persuasion. In a World Bank working paper, Bursztyn *et al.* (2105) conducted a field experiment and found that when late-paying credit card customers received text messages quoting Islamic religious text, repayment improved by 20% and that this moral appeal was more effective than substantial financial incentive (in the form of cash rebate). Such an empirical observation presents itself as an opportunity for Islamic banks to rein in payment delinquency and reduce costs associated with bad debt.

The unquantifiable cost of non-Shari'ah compliance risk

One “cost” that is unique to Islamic financial institutions is that of the risk of non-*Shari'ah* compliance. This added dimension of operational risk represents the potential of deficiencies in execution of transactions which lead to pronouncements of non-*Shari'ah* compliance, resulting from self-discovery or external *Shari'ah* compliance audits. In such

² RM15 per RM1 million (22 days and above) trading fee, access fee of RM100 per token per month, plus any applicable taxes

events, the categorical “non-compliant income” would have to be channelled to charity as a means of “cleansing” and thus represents a cost to the bank. A more serious type of non-*Shari’ah* compliance risk is when products or practices that were initially or previously declared as *Shari’ah* compliant subsequently have their *Shari’ah* compliance questioned. In recent times, there have been a number of legal cases where the *Shari’ah* compliance of Islamic commercial contracts has been subjected to scrutiny. For example, in *Affin Bank v Zulkifli Abdullah* (2006) 3 MLJ 67, the validity of the *Bay’ Bithaman Ajil* (BBA) contract was debated. Another infamous case was that of *The Investment Dar Company versus Blom Development Bank*, where the former put forth a defence that the previously contracted upon *wakalah* agreement was in fact not in compliance with the *Shari’ah*. Most recently, the case of *JRI Resources Sdn Bhd v Kuwait Finance House* centred on the issue of which authority would prevail in deciding permissibility of practice in Islamic finance (and in a sense, *Shari’ah* compliance) – the *Shari’ah* Advisory Council (SAC) of Bank Negara Malaysia (BNM) or civil courts. Notwithstanding the prevailing ruling from these cases, their occurrences highlight the potential for non-*Shari’ah* compliance risk. This risk, when realized, incurs litigation costs. More importantly, it could be argued that uncertainty over *Shari’ah* compliance and possibility of it being questioned in courts of law in future, adds a risk premium which in turn could increase the cost of raising funds via Islamic financial instruments. Such a “cost” however, would be difficult to quantify and report.

Costs in Islamic Capital Markets

Islamic equities

Shari’ah stock screening involves the process of identifying economic sectors which are deemed non-compliant from an Islamic perspective. The sectors typically include conventional finance and insurance, gambling and gaming, production and sale of alcoholic beverages, tobacco and some forms of impermissible entertainment. In addition, financial ratios are computed and applied to limit the quantum of debt financing, interest income and level of cash and receivables. As a result of this process of *Shari’ah* stock screening, a universe of stocks investable by Muslim investors is arrived at. The resulting Islamic equity portfolio is unmistakably a form of a constrained portfolio – comparable to modern day socially responsible investing (SRI) portfolios or portfolios constructed by ethical funds. Modern portfolio theory posits that such a portfolio would have sub-optimal levels of portfolio diversification, given that certain stocks and sectors are inaccessible. This in turn, may affect risk-adjusted return performance of the said portfolios. In other words, at least of a theoretical plane, there is a diversification “cost” of *Shari’ah* compliance.

Research works that deal in depth with the diversification perspective in articulating the comparison between constrained portfolios and mainstream portfolios are few and far between. Hoepner (2010) argues that it is wrong to make an inescapable conclusion that constrained portfolios such as SRI-based ones will always have worsened levels of portfolio diversification. A simple theoretical model was developed with three primary drivers of portfolio diversification – (i) number of stocks, (ii) correlation of stocks, and (iii) average specific risk of stocks. While ethically screened portfolios will nearly always lose out in terms of the first two drivers, it may not necessarily be the case for the third. In fact, it was argued that many SRI funds would typically have lower average

idiosyncratic risks, even to the point of offsetting any disadvantage they would have in terms of the first two drivers. This is especially the case when positive screening takes place (actively looking for best-in-class investments) as opposed to merely negative exclusionary screening (just avoiding irresponsible firms). Borrowing the author's "eggs in baskets" analogy, the argument is that socially-responsible investing may end up with fewer baskets to work with, but the quality of the selected baskets could be higher.

There is a clear dearth in empirical research addressing this perspective in the case of Islamic equities. Kamil *et al.* (2019) offers early empirical evidence that it is not a foregone conclusion that Islamic portfolios are inescapably handicapped in terms of portfolio diversification. It is felt that more research is warranted to shed more light on this issue.

Sukuk

Sukuk markets today can be characterized as having relatively thin trading. Many Islamic financial institutions, Islamic funds and other investors with Islamic mandates are restricted to only *Shari'ah* compliant securities. This being the case, demand often outstrips supply, evidenced by frequent oversubscription of *Sukuk* issuances. To maintain their asset portfolios, these aforementioned investors of *Sukuk* typically adopt a buy-and-hold strategy with their *Sukuk* investments. This explains the lack of trading in secondary markets. It has been argued that such thin trading may impose a liquidity premium factored into *Sukuk* pricing. This represents an irony given that it is posited that generally demand for *Sukuk* is greater than its supply. Such an idiosyncrasy may well be worth researching.

Apart from this liquidity premium "cost", it is worth mentioning that *Sukuk* markets are also exposed to non-*Shari'ah* compliant risk, in line with earlier discussions. The recent default of the Dana Gas *Sukuk* is a case in point. *Sukuk* investors inadvertently assume the risk of *Sukuk* issuer defaulters entering into defence the argument of non-*Shari'ah* compliance. A more distant (in year 2008) yet impactful example was when the then-chairman of AAOIFI's *Shari'ah* Board Sheikh Muhammad Taqi Usmani was quoted by media to have said that a large portion of *Sukuk* issued at the time were not *Shari'ah* compliant. The statement sent shockwaves across the industry and *Sukuk* issuances dipped significantly in the years that followed. These highlight a potential albeit hidden cost of *Sukuk* issuance.

Islamic venture capital

Anwer *et al.* (2019) argued that a number of challenges are faced by players in the Islamic venture capital market. Investors may be perturbed by the relative lack of transparency and absence of uniform legal framework in Islamic markets. Protection of intellectual property rights and patents in these markets are also in question. Effective mechanisms for dispute resolution and specific laws or regulations to protect rights of contracting parties may not be well developed or even absent. Entrepreneurial development programs to enhance critical competencies to produce entrepreneurs of high calibre may be lacking. As a whole, these considerations may well increase the cost of raising venture capital funds.

Conclusion

A summary of the issues discussed in this paper, presented as research opportunities, are listed below.

- i. Should there be consistency between the manner in which Islamic financial transactions are designed and contracted, and the way these transactions are recorded and reported?
- ii. Should indirect costs be included in the calculation of compensation for payment delinquency?
- iii. How should we account for indirect costs for Islamic banking windows?
- iv. Should indirect costs be deducted in computing *mudarabah* profit?
- v. Is the quantum of cost of funds similar between Islamic and conventional banks?
- vi. Are there significant differences in the cost efficiency of Islamic banks versus conventional banks?
- vii. Do Islamic banks have higher regulatory costs? Does this change with the new IFSA 2013 investment accounts?
- viii. Are asset-liability management and risk management more costly to implement with Islamic banks?
- ix. Do Islamic banks have materially higher operational costs?
- x. Do Islamic banks face higher costs of bad debt compared to conventional banks?
- xi. To what extent does the risk of non-*Shari'ah* compliance increase the cost of doing business in Islamic finance?
- xii. Is there a diversification cost of *Shari'ah* compliance in Islamic equities?
- xiii. Is there a liquidity premium in *Sukuk* and how does it affect *Sukuk* pricing and costs of *Sukuk* issuances?
- xiv. Is the cost of raising venture capital in Islamic markets significantly higher?

References

- Anwer, Z., Asadov, A., Kamil, N.K.M., Musaev, M., & Refede, M. (2019). Islamic venture capital – issues in practice. *ISRA International Journal of Islamic Finance* 11(1), 147 – 158.
- Ariff, M., Badar, M. K., Shamsheer, M., & Hassan, T. (2011). Performance of Islamic banks and conventional banks. *The foundations of Islamic banking theory, practice and education*, Elgar, Cheltenham, 127-152.
- Bursztyn, Leonardo and Fiorin, Stefano and Gottlieb, Daniel and Kanz, Martin, Moral Incentives: Experimental Evidence from Repayments of an Islamic Credit Card (September 23, 2015). World Bank Policy Research Working Paper No. 7420. Available at SSRN: <https://ssrn.com/abstract=2664878>.
- Hoepner, A.G.F. (2010). Portfolio diversification and environmental, social or governance criteria: Must responsible investments really be poorly diversified? Working Paper. Retrieved 26 Aug 2013 from <http://ssrn.com/abstract=1599334>.
- Kamil, N.K.M., Bacha, O.I., & Masih, M. (2019). Is there a diversification “cost” of *Shari’ah* compliance? Empirical evidence from Malaysian equities. Working paper submitted for journal publication.
- Mohd Noor, Azman, & Haron, Muhamad Nasir (2016). A Framework for Determination of Actual Costs in Islamic Financing Products. *Journal of Islamic Finance* 5(2), 37 – 52.