Islamic EquityBuilder Certificates™: Islamic innovation in quantitative modelling

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Introduction

Until very recently, investors who wished to adhere to the principles of *Shari'a* were limited in their options. Most *Shari'a* equity-based products were narrow in scope and offered as funds to only a small audience. They took the form of actively managed equity portfolios and the performance from many of these funds did not match the Islamic benchmark. During late 2002, Deutsche Bank was approached by National Commercial Bank (NCB) in Saudi Arabia to develop an alternative equity investment for the Islamic client base. Up until this point, there was no quantitatively based equity investment product being offered.

Determining the criteria

In order to develop any quantitative investment strategy, it is important first to outline the parameters of the strategy. These include:

- client base and suitability;
- type of investment;
- selection pool and benchmark;
- selection methodology;
- back-testing parameters;
- performance attribution; and
- wrapper.

Client base and suitability

It was clear that the intended client was to be any investor who was interested in obtaining equity-like performance from a structure that adhered strictly to the requirements of *Shari'a* investment. It is also important to ascertain where there is appropriate fit in the client portfolio. This strategy would be well-suited to be in any portfolio where *Shari'a*-compliance is a requirement. However, in addition to the *Shari'a* requirement, this strategy should represent a meaningful portion of the equity component of any portfolio. Investors with an appetite for equity risk exposure, either global or regional, and the freedom to adjust regional allocation using a 'building block' approach, would be ideal candidates for such a strategy.

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Type of investment

As specified, the investment was to be equity-based, liquid, quantitative, transparent and without any subjectivity in the selection process. The aim was for a portfolio that could be easily distinguished from an actively managed equity fund in three ways: an easily understood, transparent stock selection methodology; better performance than the typical managed equity fund; and, of course, *Shari'a*-compliant.

Selection pool and benchmark

The selection pool must meet certain criteria to be considered suitable for a quantitative equity portfolio. It must be liquid (ie, able to trade in reasonably large amounts on a daily basis with little or no market impact); publicly available or at least publicly known; and it must have historical constituents available for back-testing. Typically, the selection pool is determined as a subset of the accepted benchmark for the investment. In the *Shari'a*--complaint world, there are two publicly known equity benchmarks: the TII-FTSE Islamic Index and the Dow Jones Islamic Market Index. Each of these benchmarks has a reasonably long history, has historical constituents available, contains liquid stocks and is publicly available (for a fee). The analysis of the selection pool also requires a complete understanding of an index's *Shari'a*-compliance, in other words, how do the compilers make their index compliant and what rules are followed.

Selection methodology

The manner in which the selection pool is narrowed-down to a final portfolio is probably one of the most important facets of building a quantitative equity strategy. The model must be logical, have its basis in financial theory and practice and, most of all, must be at least reasonably consistent in its performance. Of course, past performance is not indicative of future results, but when trying to build an investment model, it is important to develop the model with a strong logic that relates to the behaviour of stock prices. Some of the typical stock selection models often utilised today include:

- value (low price-to-earnings ratio, high dividend yield, low price-to-book value ratio);
- growth (EPS growth based on an historical forecast perspective, revenue growth or asset growth); and
- momentum (price changes, earnings estimate changes).

Each of these models has its plusses and minuses but, as will be seen later, within a *Shari'a*-compliant selection pool some of these models are not appropriate.

Back-testing parameters

Once a selection pool and methodology are determined, it is necessary to outline the back-test parameters. Simply put, these are the 'rules' that will be followed when trying to recreate a portfolio back in time to simulate the performance of the selection methodology. How often will the portfolio be rebalanced? Will the portfolio be equal weighted, capitalisation weighted or factor weighted? How will div-

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idends be treated (excluded, reinvested or distributed)?

Performance attribution

After the completion of the back-test, it is necessary to ascertain whether the performance derived from stock selection (as is hoped), sector allocation or even just coincidental factors. The quality and integrity of the model must be justified by some sort of performance attribution that will determine whether or not the model is adding alpha to the portfolio. In addition, the risk associated with the portfolio (volatility) compared to the benchmark must be assessed to determine the risk versus return relationship between the portfolio and the benchmark to ensure that there is no additional investment risk.

Wrapper

Once the model is completed and the portfolio methodology verified, the wrapper (how an investment is offered to the public) must be determined. There are numerous wrappers used for structured products, but the two most prominent are the certificate and the fund. Each has its advantages and disadvantages, which will be addressed later in the chapter. In either case, a national exchange listing, daily liquidity, and quotations on Bloomberg and Reuters would be desirable features for such a product.

Analysing the benchmarks

As mentioned earlier, there are two primary Islamic equity indices that have been used as benchmarks, the TII-FTSE Islamic Index and the Dow Jones Islamic Market Index. Both index providers offer subindices based on regional breakdowns. The first task for Deutsche Bank and NCB was to examine each benchmark index and ascertain the level of *Shari'a*-compliance. The scholars at NCB, as well as the written documentation provided by Dow Jones and TII-FTSE, were relied upon for *Shari'a* screening procedures in order to evaluate each index alternative. The practices of *Shari'a* investment is a huge topic, but for the purposes of this chapter let us simply state that, between the two indices, the Dow Jones Islamic Market Index appeared to have a greater degree of *Shari'a* screening within its methodology.

For example, the TII-FTSE did not necessarily exclude as many industries from their index as did Dow Jones with theirs. Secondly, Dow Jones used a series of financial ratios to segregate those companies with an unacceptable level of debt, interest income and accounts receivable, whereas TII-FTSE had no such screening. As we were interested in appealing to the widest base of Islamic investors, and because NCB was a highly regarded *Shari'a* presence in the Middle East, we felt that it would be wisest to err on the side of conservatism.

Before the back-tests could begin, the liquidity of the Dow Jones Islamic Market Index was analysed. In total there were as many as 1,400 stocks in the index at any given time and the majority of these stocks were fairly illiquid. Liquidity is always the most important criterion when building a structured product portfolio, so this was a major concern for the model. Fortunately, Dow Jones breaks their index down into three segments – large, medium and small, referring to market capitalisation of the stock. It was relatively easy to eliminate the illiquid names by simply excluding the medium and small segments. This left us with a robust universe of approximately 300 stocks as a selection pool. The next stage was

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to obtain some sort of constituent history from Dow Jones in order to replicate the available stocks from the selection pool at periodic intervals going back in time.

Dow Jones was not able to provide a complete constituent history but was able to give us most of the history on an annual basis going back to the inception of the Islamic Market Index in 1996. Through careful analysis of each constituent list, we were able to verify the components and pricing of each annual selection pool. We were confident that the Dow Jones constituent history, while not perfect, was certainly sufficient to test our model. The historical constituent file was constructed on a quarterly basis from January 1996 through December 2002, and it was decided that the best approach to the strategy was to develop and test a portfolio for each of the three major geographical regions: the United States, Europe and the Asia Pacific region. Therefore, the selection pool was further stratified into the three regional components. Due to liquidity and trading limitations in certain markets, some countries were excluded from the selection pool. In the end, emerging markets were excluded. The composition of the regional selection pools was as follows:

- *Europe:* Austria; Belgium; Denmark; Finland; France; Germany; Ireland; Italy; Netherlands; Norway; Portugal; Spain; Sweden; Switzerland; and the United Kingdom.
- *Asia Pacific:* Australia; Hong Kong; Japan; and Singapore.
- *United States:* United States.

Once the three regional portfolio strategies were developed, a 'Global Portfolio' would be created using a weighted combination of the three regional portfolios. The weighting would mirror the regional weighting if the Islamic Benchmark Index, which was 50 per cent United States, 33.33 per cent Europe and 16.67 per cent Asia Pacific.

Determining the stock selection model

Before deciding upon a final model, it was necessary to test a number of traditional stock selection models to determine which factors appeared best at predicting share price performance. It was interesting to discover that many of the traditional factors often used to build quantitative equity models simply did not generate alpha when applied to an Islamic universe of stocks; considering that the Islamic universe was void of many sectors that are relatively abundant in traditional benchmarks. Banks, insurance companies and other industries with businesses that are unacceptable in *Shari'a* terms are often large components in many traditional equity models. In particular, the absence of financials significantly affected the ability of a traditional value model to add alpha because financial stocks are often a large portion of a non-*Shari'a*-compliant value portfolio. When considering high dividend yielding stocks as a value component, the question was raised as to how to handle the abnormally high dividend payments given the usual requirement for *Shari'a* 'cleansing' of dividends. Once again, a traditional value approach proved to be unsuccessful in a *Shari'a* environment.

After exhausting the traditional quantitative models, it became necessary to think 'outside the box'. After careful re-examination of the selection pool, we realised that there was a very large weighting of technology, pharmaceutical and telecom shares. It was clear that traditional value methodologies were not likely to be successful with such a selection pool because these sectors rarely trade on valuation. The next step was to approach the stock selection from a growth perspective. Our experience with

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analysing so-called growth sectors had led us to develop a model in the early 1990s based on the change in the earnings outlook for companies rather than a simple growth rate. Over the years Deutsche Bank Research discovered that one of the primary drivers to share price movement was not the forecast growth rate in earnings, nor was it the actual reported growth in earnings. The single greatest factor that led to price movement (in both directions) was the change in the earnings outlook. In other words, stocks with increasing earnings estimates consistently outperformed stocks with decreasing earnings estimates.

A simplistic earnings estimate revision model was adapted to test the stock selection process for the large capitalisation Islamic index selection pool outlined earlier. The model was quite simple: for each stock in the selection pool, calculate the ratio of net earnings estimates upgrades, less downgrades, as a percentage of the total number of earnings estimates. In formula form:

$$\frac{\text{Number of FY1 earnings estimates increased} - \text{Number of FY1 earnings estimates decreased}}{\text{Total number of FY1 earnings estimates}}$$

Thus the estimate revision (or EREV) ratio was born. The source of the earnings estimate revision data was a company called Institutional Brokerage Estimate System (IBES), which has been collecting earnings estimates from every brokerage firm in the world for over 20 years. The reason that FY1 (fiscal year 1) earnings estimates were analysed is that we discovered that the market is primarily focused on a 24-month window. The market typically concentrates on the past 12 months earnings and the next 12 months earnings. More importantly, changes to FY2 or five-year growth rate estimates have much less impact on share prices than changes to FY1 earnings estimates. Because the aim was to find a model that would help to identify shares that were likely to perform better than the market, it was natural to select the nearer term earnings estimates.

Why do earnings estimate revisions affect share prices?

The price of a stock is highly dependent upon growth in earnings. Companies with higher earnings growth should be entitled to a higher share price than companies with lower earnings growth. The increased earnings imply a future increase in dividends and subsequent higher investor returns. Therefore, investors should tend to seek out companies with above average earnings growth.

Investors have relied on consensus earnings estimates to ascertain which companies are most likely to provide the best earnings growth in the future. However, earnings estimates are not static – they change over time. The earnings outlook for some companies improves and for other companies the outlook becomes less positive or even negative. Since the consensus estimate is a moving target, it is the change in earnings estimates over time that provides meaningful insight into share price performance.

For example, if the outlook for a company's earnings becomes more optimistic (or less pessimistic), the shares become more attractive to investors. As more investors want to own shares with an improving earnings outlook, demand for the shares increases, which leads to upward price movements. Conversely, if the outlook becomes less optimistic (or more pessimistic) the shares become less attractive to investors. As more investors reduce their investment in these shares, prices come under downward pressure.

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Two dimensions of earnings estimate revisions

Analysis of historical data has shown that recent changes to earnings estimates can explain a great portion of share price movement. There are two aspects to earnings estimate revisions that need to be considered, namely direction and breadth.

The direction of earnings estimate changes determines whether the outlook is improving or weakening, and it can be measured in a number of different ways. One could simply calculate the absolute difference between the old estimate and the revision, or calculate the percentage change in the estimate. However, examining the behaviour of estimate revisions has yielded a consistent behaviour. The analysts that prepare their earnings estimates are typically not prone to making a single change to an estimate. Rather, they tend to make small, incremental changes over a period of time. Therefore, simply measuring one revision in terms of how large it is does not necessarily provide predictive information regarding the future movement of share prices. We decided that a more effective measure of the revision is reflected in the difference between the number of analysts who have upgraded their current estimate compared to the number of analysts who have downgraded their current estimate. If this difference is greater than zero, it can be inferred that the outlook for earnings growth has improved, which would imply higher share prices going forward. Conversely, if the difference is less than zero, a more pessimistic outlook can be inferred, which would imply weakening share prices going forward.

While this might seem all that is necessary (and many estimate revision models stop at this point), there is actually a second facet to the analysis (often overlooked) that can provide a better measurement of the change in a company's earnings outlook, namely the breadth of the estimate revision. To understand this second aspect, consider what is measured when one stops at the difference between the number of upgrades versus downgrades. Let's look at two hypothetical stocks:

Stock A		**Stock B**	
# of estimates upgraded	= 8	# of estimates upgraded	= 9
# of estimates downgraded	= 1	# of estimates downgraded	= 3
# of estimates unchanged	= 21	# of estimates unchanged	= 0
# of analysts that follow the stock	= 30	# of analysts that follow the stock	= 12

Direction of estimate revisions:
8 − 1 = + 7 (outlook is improving)

Direction of estimate revisions:
9 − 3 = + 6 (outlook is improving)

Breadth of estimate revisions:
+ 7 / 30 = + 23 per cent

Breadth of estimate revisions:
+ 6 / 12 = + 50 per cent

23 per cent of Stock A earnings estimates are higher than they were one month ago.

50 per cent of Stock B earnings estimates are higher than they were one month ago.

Stock B is more attractive than Stock A when direction and breadth are considered.

If we were to consider only the direction of the estimate revisions, Stock A would appear to be more attractive because it had a difference of +7 versus +6 for Stock B. Only when the net difference is com-

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pared to the total number of estimates do we get a flavour for the 'breadth' of the estimate revision. Once the breadth is included, it became clear that Stock B is in fact the more attractive investment based on estimate revisions. This is because a greater percentage of the analysts who follow Stock B increased their estimates. Breadth could also be defined as the 'conviction' of the analytical community that the estimate needs to be changed. By including breadth in the calculation, we are better able to refine the ranking of stocks and avoid selecting a stock with a large difference that is not a large percentage of the total number of estimates.

Why isn't the magnitude of the revision as important?
We have found through empirical study that the number of estimates that change is more indicative of possible future share price changes than the amount by which an estimate is changed. As alluded to earlier, the reason that stock prices rise on estimate revisions may be due to the fact that investors tend to follow the announced changes to earnings estimates regardless of the magnitude of the change. This would suggest that investors are directionally driven. In addition, earnings forecasting is more of an 'art' than a 'science', which suggests that the accuracy of a point estimate may have less validity than the overall change in expectations. Therefore, we believe that share prices are driven more by the direction and conviction of the changes in market sentiment than by the actual amount by which that sentiment changes.

What about efficient markets?
Finance 101 teaches us that all stock prices adjust immediately to all publicly available information in the market. This would suggest that any and all changes to earnings estimates are immediately reflected in the stock price and therefore that there is little opportunity for excess return using the proposed model. While a discussion on market efficiency is a topic for an entire book, let us at least agree that there are certain inefficiencies in the market that create opportunity for alpha generation. More importantly, given the fact that analysts change their estimates over a period of time rather than just once, and not all analysts change their estimates at the same time or by the same increment, it follows that the movement of share prices in reaction to the dynamic changes in the consensus estimate are not instantaneous. Therefore, it is possible that alpha can be derived from a model such as the one described. Moreover, the results of the in-sample and out-of-sample tests suggest that there is indeed plenty of alpha to be derived from this strategy. If the markets were truly 100 per cent efficient, then the there would be no point in investing in anything other than the market index because alpha would not exist. The fact that investors disagree about the outlook for the economy, oil prices, industry growth and, of course, the outlook for earnings, provides the fuel by which the estimate revision engine can run.

Performance assessment: Testing the model

In order to test the portfolio strategy we constructed a portfolio selection model which used the selection pool on the rebalancing date (quarterly beginning on 1 January 1996 through 31 December 2002, and then from 1 January 2004 through 31 December 2004 for the 'live' running of the strategy).

At each rebalancing date, the estimate revision (EREV) ratio for each company in the selection pool was calculated using the IBES 'Historical Consensus' database for that rebalancing date. For example, for the 1 January 1996 rebalancing, the constituents of the selection pool from Dow Jones on that date

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Exhibit 16.1 **Annualised portfolio returns***

| | *Annualised percentage return* | | | |
	Global	*Europe*	*Asia Pacific*	*United States*
Islamic EquityBuilder Portfolio[TM]	22.3	23.4	14.3	22.6
Dow Jones Islamic Index[TM]	9.1	9.2	5.8	9.8
Conventional benchmark**	6.1	9.0	–0.1	9.5
Excess return versus:				
Islamic benchmark	13.2	14.2	8.4	12.8
Conventional benchmark	16.3	14.4	14.3	13.1

*Returns after 7 February 2003 are actual live performance; prior to this date, returns are back-tested.

**Conventional benchmarks:
  Europe   STOXX Index[TM]
  Asia Pacific   Dow Jones Asian Titans Index[TM]
  United States   S&P 500 Index
  Global   Dow Jones Global Titans Index[TM]

Source: **Deutsche Bank, Bloomberg, Dow Jones, STOXX**

were used. Then using the IBES database, the EREV ratio was calculated for each company using the number of FY1 earnings estimates that were increased over the previous 30 days (ie, 1–31 December 1995). The other components of the EREV ratio were determined for the same time period (the previous 30 days prior to the rebalancing date).

Once the EREV for each stock in each regional selection pool had been calculated, we simply selected the 20 stocks with the highest EREV ratio from the Europe selection pool, which comprised the Islamic Europe EquityBuilder Portfolio[TM]. The same procedure was followed to build the Islamic Asia Pacific portfolio and finally the Islamic US portfolio. However, because the US selection pool was consistently larger in number than the Asia Pacific or Europe selection pools, the US portfolio consisted of the 30 highest ranked EREV ratios. The 'Global Portfolio' was merely the region-weighted (see the above discussion on regional weights) combination of the three regional portfolios (70 companies in total). At each subsequent quarterly rebalancing date, the entire process was repeated and new equal-weighted regional and global portfolios were generated.

Each of the regional portfolios was equal weighted. The reason for equal weighting rather than capitalisation weighting was based on our experience when building quantitative equity models with a large cap selection pool. In general, there is no direct relationship between the degree of performance from a stock and its relative market capitalisation. Therefore, if the size of a portfolio constituent is not going to have a bearing on its absolute return, it is better not to make a decision on overweighting the holding. Secondly, equal weighting shows the 'average' performance of a highly ranked EREV stock and removes the potential distortion of portfolio returns if capitalisation weighting were used.

Exhibit 16.1 indicates, the Islamic EquityBuilder Portfolio Strategy[TM] delivered significant outperformance relative to both the Islamic benchmarks and the traditional (non-Islamic) benchmarks. Exhibits 16.2–16.5 show the historical absolute total returns (log scale) of each Islamic EquityBuilder Portfolio[TM] compared to its respective Islamic and non-Islamic benchmark. The returns of the portfolios include all rebalancing and trading costs but do not include any management fees that may be charged on a product tracking the portfolios. Also, 75 per cent of dividends were reinvested back into the portfolios due to the fact that 100 per cent of dividends are not realised for tax reasons. All of the portfolio and benchmark returns are expressed in US dollars except for the Europe portfolio and benchmarks, which are expressed in euros.
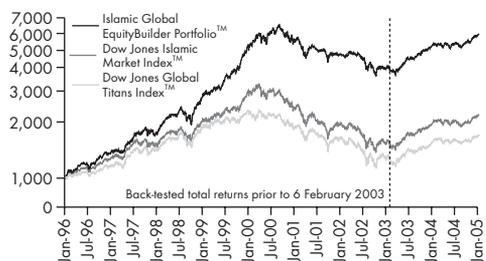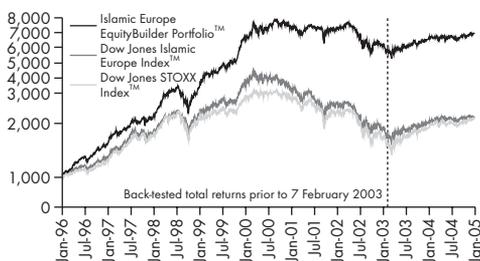
Risk versus return comparisons

The annualised daily volatility over the entire performance history of the Islamic EquityBuilder Portfolios[TM] was compared to the annualised returns and plotted against the same information for the Islamic benchmark indices. Exhibit 16.6 shows that the Islamic Global EquityBuilder Portfolio[TM] has

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Exhibit 16.2 **Performance comparison:
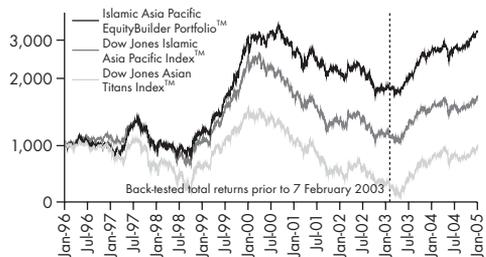Islamic Global EquityBuilder Portfolio™, 1996–2005**

Sources: Deutsche Bank, Bloomberg, Dow Jones.

Exhibit 16.3 **Performance comparison:
Islamic Europe EquityBuilder Portfolio™, 1996–2005**
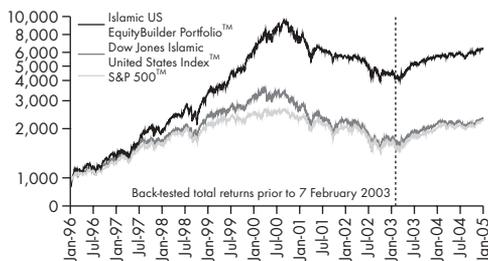

Sources: Deutsche Bank, Bloomberg, Dow Jones, EuroSTOXX.

Exhibit 16.4 **Performance comparison:
Islamic Asia Pacific EquityBuilder Portfolio™, 1996–2005**
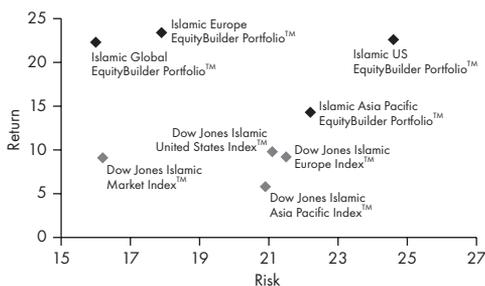

Sources: Deutsche Bank, Bloomberg, Dow Jones.

Exhibit 16.5 **Performance comparison:
Islamic US EquityBuilder Portfolio™, 1996–2005**

Sources: Deutsche Bank, Bloomberg, Dow Jones, Standard & Poor's.

offered over double the annualised return for taking slightly less risk than the Islamic Global Benchmark Index. A similar relationship exists for the Islamic Europe EquityBuilder Portfolio™ where significant incremental excess return is achieved while taking much less risk. For the US and Asia Pacific Portfolios, significant incremental excess return over the benchmark was generated but additional risk was incurred. However, on a return-per-unit-of-risk basis **(see the table below)**, all of the Islamic EquityBuilder Portfolios™ have offered superior results both in the back-test and since going live in February 2003.

Exhibit 16.6 **Return per unit of risk (%)**

Sources: Deutsche Bank, Dow Jones.

Creating the wrapper and securing approvals

Upon completion of the back-test and analysis of results, the next steps involved creating an investment wrapper and obtaining a *fatwa* for the Islamic EquityBuilder products. The most desirable wrapper for such an investment strategy was a certificate. In principle, the Islamic EquityBuilder Certificates™ would

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Exhibit 16.7 **Islamic EquityBuilder Certificates™ performance since inception, February 2003 (%)**

IEB and comparative benchmarks	Returns since inception*	IEB and comparative benchmarks	Returns since inception*
Islamic Global EquityBuilder™	55.67	**Islamic US EquityBuilder™**	46.35
Dow Jones Islamic Global Index™	51.68	Dow Jones Islamic United States Index™	45.18
Dow Jones Global Titans Index™	44.84	S&P 500 Index™	51.04
Islamic Asia Pacific EquityBuilder™	78.43	**Islamic Europe EquityBuilder™**	23.40
Dow Jones Islamic Asia Pacific Index™	54.83	Dow Jones Islamic Europe Index™	31.33
Dow Jones Asian Titans Index™	56.87	Dow Jones STOXX Index™	43.72

* As of 7 February 2003 until 31 December 2004. Islamic EquityBuilder Certificate returns include fees. All returns include dividend reinvestment and are in US dollars except for Europe, which are in euros.

Source: ???

be nationally listed on the Frankfurt Stock Exchange, offer daily liquidity and be sold in amounts as low as US$100 per certificate on the offering. It was determined that not only the investment strategy but also the products themselves would be fully *Shari'a*-compliant.

In cooperation with NCB and their *Shari'a* board, the approval process was initiated and only a few small changes to the selection pool methodology were required before the *fatwa* was granted. The board felt that there should be an additional financial ratio test for each of the companies in the Dow Jones Islamic Market Index. This ratio was a comparison of non-operating interest income as a percentage of revenue. Any company with more than 5 per cent of their total revenue sourced by non-operating inter-est income would be excluded from the Islamic EquityBuilder selection pool. Dow Jones agreed to our request that they include this calculation for each company in the Islamic Market Index whenever they supplied us with the constituent list.

In addition to the extra financial ratio screen, the NCB *Shari'a* board also stipulated that NCB be given the opportunity after each portfolio selection to disapprove of a portfolio constituent based on *Shari'a* principles. The purpose of this additional requirement was to ensure that the Islamic EquityBuilder Portfolios™ always complied with NCB *Shari'a* board principles, which might not always be in agreement with the Dow Jones *Shari'a* interpretation. At each rebalancing date, the constituents of each Islamic EquityBuilder Portfolio™ would be sent to NCB along with all of the underlying Dow Jones Islamic financial ratios and industry designations for each company. Following NCB approval for each constituent, the portfolio constituents would be traded.

Finally, in order to provide *Shari'a*-compliance to the wrapper, the assets of the Islamic EquityBuilder portfolios would be segregated so that each and every investor would be protected in the event that Deutsche Bank was ever unable to meet its financial commitments. By segregating the assets from the Deutsche Bank balance sheet, any potential insolvency issues that could arise would not impact the assets underlying the Islamic EquityBuilder investors.

Based on those stipulations, a *fatwa* was granted. Notably, this was the fist ever instance of a fully *Shari'a*-compliant quantitative equity strategy that included the wrapper as well as the portfolio strat-egy.

Performance since inception is set out in Exhibit 16.7.

Summary

The development and implementation of Islamic EquityBuilder Certificates™ represents a milestone in

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Islamic equity investing. The significant outperformance that has been observed both in and out of sample suggests that the portfolio strategy has merit and continues to identify stocks with a higher probability of outperforming the market.

In considering the EREV ratio as a stock selection tool, one cannot help but reflect on the other side of the equation, namely those stocks that have had the greatest number of downgrades to their earnings outlook. Consider the possibility that the EREV performs another function. By ranking stocks based on the EREV, we are systematically and objectively excluding from investment those companies that have had their earnings estimates downgraded by the largest number of analysts. It is not hard to argue that stocks that are downgraded by analysts typically underperform the market following their earnings downgrades. Moreover, it is not uncommon for a stock that has been downgraded to undergo further downgrades in subsequent months. For those that find it difficult to grasp the EREV ratio as a stock picking metric, it may be easier to see the value in this methodology by assuming that a portfolio that excludes the stocks with the most negative recent downgrades should, by definition, outperform a benchmark that always contains those stocks.

While there are a multitude of investment opportunities available to Islamic investors, none that we are aware of offer returns at a lower level of risk combined with the flexibility, liquidity, transparency and objectivity of the EquityBuilder Portfolio Strategy™.