

**MEASURING CREDIT RISK OF ISLAMIC BANKS  
IN MALAYSIA**

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## **ABSTRACT**

This paper aims to examine the determinants of Islamic banks credit risk in Malaysia, being an emerging country. Our sample includes all Islamic banks over the period of 2008 to 2012. Overall, the results show that the main determinants of bank credit risks in Malaysia are: Gross domestic product (GDP), Non-performing loans (NPL), Loan loss provision (LLP) and Credit growth (CRG). Hence, five variables comprising two external factors (GDP and INF) and three internal factors (NPL, LLP and CRG) are applied as independent variables. The dependent variable is credit risk, which is measured by non-performing loan to total loan ratio. The study used an OLS regression equation, applying an error correction Model on the equation and tested the values at 5% significance level to investigate the determinants of credit risks in the Malaysian Islamic banks. The results show that all the independent variables together explain 99.4 percent of the variation of credit risks. Both the two external factors, gross domestic product measured by aggregate economic activities is significant and negatively related to credit risk, while inflation rate measured by CPI is positively related but statistically insignificant and it is similar with findings of past studies. Our study shows that bank specific variables were found to affects credit risks more than the external factors. All the bank specific variables were found significant determinants of credit risks. However, loan loss provision and credit growth was not supported in the pre-assumption hypothesis. In conclusion, this thesis assesses the risk exposure and for the first time, empirically determines the factors affecting credit risks of the Malaysian Islamic banks. As credit risk is the main risk that could lead to bank failure, the results imply that the management of the banks should pay great attention to the significant factors, in particular their non-performing loan, loan loss provision and credit growth.

## **ABSTRAK**

Kertas kerja ini bertujuan mengenal pasti faktor penentu risiko kredit bank-bank Islam di Malaysia, di atas dasar bahawa Malaysia dikenali sebagai sebuah negara yang sedang membangun. Sampel kami meliputi semua bank Islam di antara tahun 2008 hingga 2012. Secara keseluruhan, keputusan menunjukkan bahawa penentu utama risiko-risiko kredit bank di Malaysia adalah: Keluaran Dalam Negera Kasar (GDP), Pinjaman Tidak Berbayar (NPL), Peruntukan Kerugian Pinjaman (LLP) dan Pertumbuhan Kredit (CRG). Oleh itu, lima pembolehubah yang terdiri daripada dua faktor luaran (GDP dan INF) dan tiga faktor dalaman (NPL, LLP dan CRG) digunakan sebagai pembolehubah bebas. Pembolehubah bersandar adalah risiko kredit, yang diukur dengan pinjaman tidak berbayar terhadap jumlah nisbah pinjaman. Kajian ini menggunakan persamaan regresi OLS, mengaplikasikan Model “Error Correction” pada persamaan dan menguji nilai pada 5% paras signifikan untuk menyiasat penentu risiko-risiko kredit bank-bank Islam di Malaysia. Keputusan menunjukkan bahawa semua pembolehubah bebas bersama-sama menjelaskan 99.4% daripada variasi risiko-risiko kredit. Kedua-dua-faktor luaran, keluaran dalam negara kasar, yang diukur dengan aktiviti ekonomi agregat, adalah signifikan dan berkait secara negatif dengan risiko kredit, manakala kadar inflasi yang diukur oleh indeks CPI, adalah berkait secara positif tetapi tidak signifikan secara statistik dan ia adalah sama dengan dapatan kajian-kajian lepas. Kajian kami menunjukkan bahawa pembolehubah spesifik bank didapati mempengaruhi risiko-risiko kredit lebih daripada faktor-faktor luaran. Semua pembolehubah spesifik bank telah didapati menjadi penentu penting risiko-risiko kredit. Bagaimanapun, peruntukan kerugian pinjaman (LLP) dan pertumbuhan kredit (CRG) adalah tidak disokong dalam pra-hipotesis. Kesimpulannya, tesis ini menilai pendedahan risiko dan buat kali pertama, secara empirikal menentukan faktor yang mempengaruhi risiko-risiko kredit bank-bank Islam di Malaysia. Memandangkan bahawa risiko kredit adalah risiko utama yang boleh membawa kepada kegagalan bank, keputusan menunjukkan bahawa pengurusan bank-bank berkenaan perlu memberi perhatian yang besar kepada faktor-faktor yang signifikan, khususnya pinjaman tidak berbayar, peruntukan kerugian pinjaman dan pertumbuhan kredit mereka.

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