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Offshore operations and bank loan contracting: Evidence from firms that set up subsidiaries in offshore financial centers

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ABSTRACT

We examine the effects of a multinational firm's subsidiary operations in offshore financial centers (OFCs) on bank loan contracting terms. Using a propensity score matched cross-country sample of firms with and without OFC subsidiaries, we find that firms with OFC subsidiaries receive less favorable loan terms than firms without OFC subsidiaries. The results from a difference-in-differences analysis and an analysis of a firm's mutation from a non-OFC firm to an OFC firm support the causal effect of offshore operations on the unfavorable loan terms. Furthermore, focusing on firms with OFC subsidiaries, we find that the intensity of offshore operations affects loan terms unfavorably. We also find that the unfavorable effect is more pronounced for more opaque firms and for firms that are headquartered in countries or jurisdictions with weaker legal enforcement. Our findings indicate that banks view offshore operations of borrowers as a credit risk-increasing factor.

1. Introduction

With the globalization of capital and product markets, more and more companies are going offshore by registering their headquarters or setting up subsidiaries in countries or jurisdictions with low tax rates, flexible regulatory regimes, and confidentiality policies. Countries or jurisdictions with some or all of these characteristics are called offshore financial centers (OFCs) (International Monetary Fund, 2000; Zoromé, 2007). Business in OFCs has been booming in the past two decades. For example, U.S. companies are shifting profits to OFCs and about 20% of all U.S. corporate profits are booked in OFCs, a tenfold increase since the 1980s (Zucman, 2014). In 2013, two OFCs, Qatar and Luxembourg, were the two wealthiest countries in the world, with a gross domestic product (GDP) per capita of approximately US$98,814 and US$78,670, respectively, compared with US$53,101 for the United States.[1] OFCs have, however, been criticized for providing firms with a means to evade taxes, launder money, and commit other economic crimes. Not

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[1] International Monetary Fund World Economic Outlook Database, April 2014 Edition.

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surprisingly, OFCs, as independent jurisdictional entities, have received increased scrutiny from regulators and outside capital suppliers. In this study, we examine how a firm's offshore operations via establishing one or more subsidiaries in OFCs affect its bank loan contracting.[2]

The key reasons that OFCs can attract foreign firms to establish subsidiaries lie in their low tax rates, secrecy and confidentiality policies, and less stringent regulatory regimes, compared to onshore jurisdictions (Masciandaro, 2008). Typically, OFCs offer multinational firms very low (or virtually zero) tax rates. As a result, firms can enjoy a significant tax saving by moving part of their business operations to low-tax regimes. However, the tax savings through OFC operations may have to stay offshore to avoid high repatriation tax rates (Blouin et al., 2012), and the higher tax rates in the home countries where multinational firms are headquartered over those in subsidiary countries can motivate these firms to issue debt at home through the parent company to enjoy the tax benefits of interest expenses (Arena and Roper, 2010). For example, Apple Inc. established two subsidiaries in an OFC, Ireland, where Apple has negotiated a tax rate of less than 2%. Apple has used a series of complex tax avoidance transactions to transfer its assets and profits to OFC subsidiaries and minimize its corporate tax liabilities. According to the U.S. Senate Permanent Subcommittee (2013), Apple had $145 billion in cash, cash equivalents, and marketable securities in 2013, of which $102 billion was maintained in OFC subsidiaries. To provide funds for its U.S. operations, Apple issued $17 billion in debt instruments rather than bringing its offshore cash back to the United States. How do banks view multinational firms' operations in OFCs? Do they perceive OFC operations to be a credit risk-decreasing or credit risk-increasing factor?

On the one hand, as shown by Apple's activities in Ireland, firms with OFC subsidiaries can pile up cash holdings in OFCs through tax savings, which could indicate their ability to pay off debt. These firms can use their offshore cash to pay off debt by repatriating them to their headquarters in home countries in case of credit events or by settling the debt obligations via lenders' subsidiaries in OFCs. Therefore, banks may perceive operations in OFCs to be a credit risk-reducing factor.

On the other hand, banks may be concerned about the lack of liquidity of the parent company when it shifts its income and cash holdings to OFCs, and therefore may factor the liquidity risk into the loan contracts with the parent company. In addition, there is a concern that shifting business operations to OFCs with the intention to hide income from tax authorities reduces a firm's transparency, creating opportunity for managers to divert the corporate resources for their personal gain (Denis et al., 2002; Desai et al., 2007; Kim et al., 2011a; Black et al., 2014). Many financial scandals involved firms (e.g., Enron, Parmalat, and Tyco) that had subsidiaries in OFCs. Recent studies also provide empirical evidence about the opportunistic behavior of offshore firms, such as earnings management via OFC operations (Desai and Dharmapala, 2009; Dyreng et al., 2012; Durnev et al., 2013) and tax avoidance and asset diversion through OFC operations (Desai, 2005; Desai et al., 2006; Desai et al., 2007; Desai and Dharmapala, 2006; Kim et al., 2011a; Blouin et al., 2012). Furthermore, many OFCs are characterized as jurisdictions with weak legal environments and confidentiality policies. These weak institutional characteristics make it difficult for capital providers to monitor managerial actions in firms with OFC operations. The self-dealing activities of managers and the difficulty in monitoring them could increase the credit risk of firms operating in OFCs. Therefore, banks may perceive operations in OFCs to be a credit risk-increasing factor.

Given the two conflicting predictions discussed above, we empirically investigate whether and how multinational firms' operations in OFCs are perceived by banks. Specifically, we first examine whether firms with OFC subsidiaries receive unfavorable price term (loan interest spread) and non-price loan terms (loan size, maturity, collateral and covenants), compared to firms without OFC subsidiaries. Secondly, we predict that the information asymmetry and agency problem are more severe in OFC firms with a greater number of OFC subsidiaries or in those that have subsidiaries located in uncooperative OFCs with weak legal regimes. To test this prediction, we focus on firms with OFC subsidiaries, and examine whether the intensity of OFC operations is factored into loan contracting terms.

To investigate the first question, we use the Osiris international database to identify the location of firms' subsidiaries and obtain a sample of firms with and without OFC subsidiaries from 1996 to 2011 (their headquarters are registered in 36 non-OFC countries). To control for bias arising from observable confounding factors, we use the propensity score matching approach and obtain 8324 pairs of matched observations from the treatment firms (i.e., firms with OFC subsidiaries; labeled as OFC firms hereafter) and control firms (i.e., firms without OFC subsidiaries; labeled as non-OFC firms hereafter). We find that banks charge higher interest rates, are more likely to use collateral requirements, and include more covenants in loans offered to OFC firms than to non-OFC firms. To further establish a causal link, we use the announcement of OFC black and gray lists by the Organization for Economic Co-operation and Development (OECD) in 2002 as an exogenous shock and perform a difference-in-differences analysis. We find that the changes in loan terms from the pre- to the post-2002 period for OFC firms are greater (more unfavorable), compared with the loan term changes during the same period for non-OFC firms. We further examine how the change in a firm's OFC status (mutation from a non-OFC firm to an OFC firm) affects loan contract terms. The results indicate that after a firm mutates from a non-OFC firm to an OFC firm, interest spread is larger, the likelihood of collateral requirement is higher, and there are more covenants in loans offered to the firm. These results support the casual effect of offshore operations on unfavorable loan terms.

To examine the second question of whether the intensity of offshore operations affects loan terms, we use three different measures to capture the intensity of operations in OFCs. The first measure is the number of OFC subsidiaries relative to the total

[2] We focus on firms that establish subsidiaries in OFCs, rather than firms that have their headquarters registered in OFCs, because firms with OFC subsidiaries have unique features that provide a more interesting setting to examine our research question. Briefly, the headquarters in non-OFC countries or jurisdictions are presumably subject to more stringent regulations and laws, but their subsidiaries in OFCs are subject to lax legal requirements. This multi-tiered institutional factor affords firms with OFC subsidiaries more opportunities to pursue "regulatory arbitrage" and to divert corporate resources via OFCs (Masciandaro, 2008; Kim and Li, 2014). In this study, we follow Osiris international database's definition of subsidiary, which refers to any company in which a parent owns a stake, whatever its percentage of ownership. Banks refer to commercial banks and other financial institutions that lend money to companies.