# EFFECT OF WORKING CAPITAL MANAGEMENT AND FINANCIAL CONSTRAINTS ON CORPORATE PERFORMANCE

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# EFFECT OF WORKING CAPITAL MANAGEMENT AND FINANCIAL CONSTRAINTS ON CORPORATE PERFORMANCE

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## DECLARATION

I declare that the substance of this project paper has never been submitted for any degree or postgraduate program and qualifications.

I certify that all the support and assistance received in preparing this project paper and the entire source abstracted have been acknowledged in this stated project paper.

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## ABSTRAK

Tujuan penyelidikan ini adalah untuk menyumbang kepada kajian lepas dengan memberi bukti yang empirikal terhadap kesan pengurusan modal kerja kepada prestasi korporat dan pengaruh kekangan kewangan ke atas hubungan antara prestasi korporat dan pengurusan modal kerja di firma yang tersenarai di Bursa Malaysia. Data untuk kajian ini diambil daripada Data stream, yang terdiri daripada 215 firma bagi tempoh 2008-2012. Tobin's Q digunakan sebagai proksi untuk prestasi korporat, manakala kitaran perdagangan bersih dan nisbah semasa digunakan sebagai proksi untuk modal kerja. Pemboleh ubah yang lain adalah seperti saiz firma, leveraj, peluang pertumbuhan dan pulangan ke atas asset, manakala dividen digunakan sebagai proksi untuk kekangan kewangan. Dengan menggunakan kaedah *ordinary least square* dan analisis kesan rawak, keputusan menunjukkan prestasi korporat adalah behubung kait dan berimpak negative kepada kitaran perdagangan bersih tetapi berimpak positif kepada nisbah semasa. Kajian ini juga mendapati kekangan kewangan oleh firma adalah berhubung kait secara positif dengan pengurusan modal kerja dan prestasi korporat. Hasil kajian ini juga mendapati, kekangan kewangan firma adalah berhubung kait secara positif kepada pengurusan modal kerja dan prestasi korporat. Kajian ini mendapati mengurus modal kerja secara efektif dan efisen akan memberi kesan kepada prestasi korporat dan firma yang mempunyai kurang kekangan kewangan memiliki prestasi korporat yang lebih baik berbanding firma yang mempunyai masalah kekangan kewangan. Kajian ini mencadangkan kepada firma yang ingin mencapai prestasi yang lebih baik dan untuk meningkatkan nilai kepada pemegang saham mereka perlu mempunyai modal kerja yang lebih baik dengan kitaran perdagangan bersih yang pendek serta dapat memenuhi obligasi kewangan dalam masa jangka pendek.



Kata kunci: prestasi korporat, pengurusan modal kerja, kekangan kewangan, kitaran perdagangan bersih, nilai pemegang saham.

ABSTRACT

The aim of this paper is to contribute to the previous studies by given an empirical evidence of the impact of working capital management on corporate performance and the influence of financial constraints on the relationship between corporate performance and working capital management of Malaysian listed firms in Bursa Malaysia. The data for this study was retrieved from the DataStream, consisting of 215 firms for the period 2008-2012. Tobin's Q is used as a proxy for corporate performance, while net trade cycle (NTC) and current ratio (CR) are used as proxies for working capital management. Other independent variables are firm size (SIZE), leverage (LEVERAGE), growth opportunity (GROWTH) and return on assets (ROA), while dividend (DDIV) is used as a proxy for financial constraints. By applying correlation, Ordinary Least Square (OLS), Fixed-Effect and Random-Effect regression analyses, the results show that corporate performance is related and positively significant to net trade cycle. This study also finds that firms' financial constraint is significant and positively related to working capital management and corporate performance. These findings indicate that managing an efficient and effective working capital as impact on corporate performance and firms with less financial constraints achieve better corporate performance than firms with high financial constraints. This study suggests that for a firm to achieve a better performance cum maximizing shareholder's value, it must achieve a better working capital with a longer net trade cycle (NTC) as well as meeting its short-term obligations.

Keywords: Corporate performance, working capital management, financial constraints, net trade cycle, shareholder's value.

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Nurein Saheed Adebowale.

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## LIST OF ABBREVIATIONS

NTC: Net trade cycle

CCC: Cash conversion cycle

CR: current ratio

LEV: Leverage

ROA: Return on Assets

ROIC: Return on invested capital.

ROS: Return on sales

ROE: Return on equity

# CHAPTER ONE

## 1.0 INTRODUCTION

One of the vital issues that must be vividly considered before making financial decision is the working capital; because it is an integral part of the investment and has a direct effect on the liquidity cum the performance of the organization (Ray, 2012). Though, working capital encompasses short term financing and investments, it is always overlooked when making financial decisions (Ray, 2012). Furthermore, its lack of contribution to return on equity makes it work as a hold back for financial performance (Sanger, 2001).

Managing an efficient and effective working capital needs proper plan and control of firm's current assets and its liabilities in such a way that it will reduce the incapability risk of meeting short term commitments in one hand, and the avoidance of investing excess in the assets in the other hand (Ray, 2012; Eljelly, 2004). Managing an efficient and effective working capital contributes a vital role in the general corporate strategy of a company towards creating shareholder wealth. Working capital can be referred to as outcome of time interval that exists between expenditure for purchasing raw material and collection of sales of finished goods (Ray, 2012). The approach towards managing working capital of a firm can result in a significant influence on both its profitability and liquidity (Shin and Soenen, 1998).

According to Ganesan (2007), optimizing the balance of working capital means minimizing the requirements of working capital and realizing maximum probable revenues. Furthermore, companies' free cash flow is increased by managing an efficient and effective working capital, which has positive influence on the shareholders wealth

and the companies' growth opportunity. Thus, companies always try to maintain the working capital at an optimal level in order to maximize their targeted value (Afza and Nazir, 2007), and while managing working capital efficiently is likely to provide a positive significant results, neglecting it can lead to highly dangerous situation to any company (Christopher and Kamalavalli, 2009).

The previous studies on investment decisions are based on numerous empirical and theoretical facts. These studies were carried out globally by different authors for the purpose of hypothesize firms' performance (see example, Uyar, 2009; Christopher and Kamalavalli, 2009; Raheman and Nasr, 2007; Ganesan, 2007; Chowdhury and Amin, 2007; Afza and Nazir, 2007; Sayaduzzaman, 2006; Padachi, 2006; Lazaridis and Tryfonidis, 2006; Narware, 2004; Shin and Soenen, 1998). A direct linkage between investment in working capital and firm value has been shown by some studies (Burton, 1999; Chung, 1998; McConnell & Muscarella, 1985). Moreover, a wide-range of studies (Hubbard 1998; Fazzari, Hubbard and Petersen, 1988) which focused on the imperfections of the capital market have support the findings of Modigliani and Miller (1958) that financing decisions and investment are independent.

In spite of the significance of the interconnections that exist between the items of working capital when assessing their impact on firm performance (Kim & Chung, 1990; Sartoris & Hill, 1983; Schiff & Lieber, 1974), only a few studies found significant relation between investment effects on working capital, and the impact of financing (Baños-Caballero, García-Teruel and Martínez-Solano, 2013).

There are two competing views on investment in working capital management. The first view argues that increase in sales and higher discounts for early payment will be achieved by companies with high level of working capital and this will increase the value of the firm (Deloof, 2003). The other view argues that financing is required to achieve a high level of working capital; hence firms will incur extra financing expenses to achieve this and subsequently, will increase the probability of bankruptcy (Kieschnick, LaPlante, & Moussawi, 2011). This indicates that inefficient and ineffective working capital management processes may also result into bankruptcy, even if the company continues to have positive profitability (Samiloglu and Demirgunes, 2008).

The fundamental part of strategy for business in generating shareholders' value is efficient and effective working capital management. A substandard investment returns by a firm can be caused by excessive level of current assets (Raheman and Nasr, 2007). In contrary, lower levels of current assets may cause a firm funds shortage and hinder smooth maintenance of business operations (Horne and Wachowicz, 2000). Precisely, an investment in working capital encompasses a trade-off between risk and profitability because it has effects on the firm performance and firm value (Sharma and Kumar, 2010). Increased risk is caused by corporate decisions that wish to increase profitability, while reduced of potential profitability is caused by corporate decisions that has its focus on reduction of risk (Sharma and Kumar 2010).

Wang (2002) showed that in Taiwan and Japan, a lower working capital investment is significantly held by firms with high values than firms that are low in value. Furthermore, the study of Kieschnick et al., (2011) on the relation that exist between firm value and working capital management showed that a dollar held in cash is worthy than averagely

investing an additional dollar in net working capital. In addition, their findings also show that on average, the excess in stock return would be reduced by an increase in net working capital, and firms that have limited access to external financing will benefit more from this reduction. This is in line with the study of Faulkender & Wang (2006) who study showed that better accessibility of capital markets, higher leverage, higher cash holdings, and firms choosing of greater cash distribution through dividends than repurchases cause decline of marginal value of cash. According to Fazzari et al., (1988) due to the fact that cost of external capital is increased by the market imperfections relative to the internal funds generated (Jensen and Meckling, 1976; Myers and Majluf, 1984; Greenwald et al., 1984) and which could cause debt rationing (Stiglitz and Weiss, 1981), firms' investment could rely on financial influences such as cost of financing, access to capital markets, and internal finance availability. Moreover, Fazzari and Petersen (1993) suggested that investing in working capital is highly sensitive to financial constraints than investing on fixed capital.

Aggressive working capital management policy is a strategy that involves targeting high risk as well as high return in investing and financing working capital. However, Conservative policy of working capital management is a policy that involves targeting lower risk and lower return in investing and financing in working capital (Weinraub and Visscher, 1998). Meanwhile, while the working capital aggressive investment policy involves investing less in current assets than in fixed assets to generate more returns; the working capital conservative investment policy involves investing more in current assets than in fixed assets (Tufail, Sidra and Amjad, 2013).

Working capital management policy that is aggressive may be adopted by a firm with a low level of current assets or finance the firm working capital by keeping current liabilities at high level (Nazir and Afza 2009; Sharma and Kumar 2010). Keeping current assets at high level could negatively influence the profitability of the firm, while a lower stock-outs and liquidity level may be caused by keeping current assets at low level, which could result in problems of maintaining efficient and effective operations (Van Horne & Wachowicz, 2004). Thus, aggressive investment strategy gives room for generating more profits via investment of major part of firms' resources on fixed assets. Conservative investment strategy helps to evade bankruptcy risk.

According to Wang (2002), a firm with aggressive policies that reduces its inventory levels to the lowest point is risking losing sales. On the other hand, a firm that applies conservative policies or investing hugely in working capital may also achieve higher profitability. Maintenance of high level of inventory reduces possible interruption cost and business loss caused by product scarcity, reduction in costs of supply, and protecting price fluctuations (Garcia-Teruel & Martinez-Solano, 2007). However, these types of benefits offset reduction in profit that is caused by the firm increase in investing in the current assets.

According to Baños-Caballero S., et al., (2013), a nonlinear relation will be achieved between investment in working capital and firm value through the combination of both the positive effects of working capital, which is higher working capital levels increases sales and higher early payments discounts (Deloof, 2003), and the negative effects of working capital, which is financing is required to achieve higher levels of working capital (Kieschnick et al., (2011).

In an imperfect capital markets, firms that are incapable of raising sufficient external funds to finance their investment activities are regarded as been in financial constraints (La Cava, 2005). Due to this assertion, investment could be significantly affected by the level of internal funding in the short run. A proof of financial constraints can be seen from the findings that internal funding significantly impact the level of firm's investments. In principle, firms that are financially constrained should show better investment sensitivity to cash flow than financially unconstrained firms. On the other hand, internal funding can also be pertinent for investment due to its provision of information on future investment opportunities (Bond et al., 2004).

Ismail, Ibrahim, Yusoff, and Zainal (2010) define financial constraints as financial difficulties hindering companies' ability to acquire external funds to finance their investment objectives. Due to this, it is necessary for firms in financial constraints to retain sufficient parts of their revenue for financing their impending investments. Ultimately, these investments may fluctuate and come to be relatively volatile depending on the internal funds availability.

Meanwhile, La Cava (2005) defines a financially constrained firm as a firm whose cost of investment rises if it generates increase in retained earnings, and fall if it generates decrease in retained earnings. Guariglia (2007) describes internal financial constraints as unavailability of internal funds for firms' investment, while external financial constraints as inaccessibility of external finance for companies' investment.

In a perfect capital markets, Modigliani-Miller theorem assumes that the capital structure of a firm is immaterial to its value. This indicates that internal finance (retained earnings)

and external finance (equity issues and/or new debt) are flawless substitutes and a company's decisions on financing and investment are absolutely independent of each other. The determinant of investment does not really depend on internal fund availability, thus, the only financial consideration in defining the level of firm investment is the price of obtaining funds (La Cava, 2005).

However, the reasons behind imperfect capital markets are numerous. Specifically, taxes, information asymmetries (between borrowers and lenders, and/or between shareholders and managers) and transaction costs contribute to high cost of external finance compare to internal finance. If there is imperfect information in a market, investment finance may not be available, or only be provided and available on less favorable terms and conditions in the external capital markets. This indicates that there may be unavailability of internal funds leading to financial constraint for investment spending of some firms. As a result, empirically, a significant determinant of investment is the level of internal funding (La Cava, 2005).

Though, most study have focused on the influence of additional working capital investment on firm value, the form of the relationship that exist between corporate performance and working capital investment shall be examine by this study. Assuming that conditions of financing could play a vital role in this relation, this study further examine whether the financing constraints of firms' affect the relationship stated above.

## 1.1 PROBLEM STATEMENT

The majority of the findings on the study of the relation between corporate performance or profitability and working capital management have been able to give an evidence of their relativity through findings of their respective measurements.

The combination of Tobin's q as a proxy of firm performance or profitability and net trade cycle (NTC) or cash conversion cycle (CCC) as a proxy of working capital management to find the relationship between firm performance and working capital management is expected to show either a negative or positive significant relationship. Tobin's q developed by Tobin (1969) is expected to have a negative sign because it gives a comparison to the value of the firm provided by financial markets and the value of its assets (Nasir and Afza, 2009). CCC or NTC could be negative or positive. A positive outcome shows the number of days a firm must tie up or borrow capital while expecting customers' payment. A negative outcome is indicating number of days a firm has obtained cash from sales before its suppliers must be paid (Hutchison et al., 2007).

Previous studies with negative significant relation between working capital management and firm performance using these variables (Tobin's q, and CCC or NTC) indicate that the reduction in NTC or CCC will increase firm performance, and also indicate that managing working capital efficiently will increase firms' market value [Mohamad and Mohd Saad (2010); Baños-Caballero, S., et al., (2013)] . In contrast, studies with positive relation between working capital management and firm performance using these variables (Tobin's q, and CCC or NTC) indicate that firm with higher CCC will achieve higher firm value [Vural, Sökmen and Çetenak (2012); and Abuzayed (2011)]. The

implication of this positive relationship on the stock market is that investors do not base their firm selection on firms with efficient and effective working capital, and also ignores liquidity as a crucial factor in evaluating companies' performance (Abuzayed, 2011). A positive relationship also shows that firms that are more profitable are less driven to manage working capital efficiently; the letdown of the financial market to penalize these companies with managing working capital inefficiently leads to such positive relationship. Though, investors realized that companies practicing and formulating efficient and effective working capital management merit more value, the financial market show less reaction in providing evidence of negative significant relation between cash conversion cycle and market valuation of firm (Abuzayed, 2011).

Moreover, Baños-Caballero, S., et al., (2013) found that NTC is positively and its square is negatively related with corporate performance. This is confirming a huge and statistically significant inverted U-shaped relationship between corporate performance and working capital. The implication of the finding is that the results of higher sales couple with early payments discounts arises when working capital level is below the optimal level, therefore, firm performance is positively influenced by working capital.

On the contrary, the financing cost as well as the opportunity cost effects arises when the level of working capital of the firm is above this optimum and, as a result, corporate performance and working capital management will be negatively related. Therefore, since there are mixed results regarding the relation between corporate performance and managing of working capital, there is need to examine the influence of requirements of working capital management on firm performance to ascertain an improvement in the

market value of the firm, which the firm's operational and strategic thinking relies on for efficient and effective operation (Mohamad and Saad, 2010).

Meanwhile, using Tobin's q, and CCC or NTC to measure the influence of working capital investment policy on firm performance shows that firm performance is negatively related to the relative degree of firm policy on aggressive investment in working capital (Nazir and Afza, 2009). This finding implicates that adopting aggressive approach towards working capital management is not acceptable to investors and do not add any significant value to the companies (Nazir and Afza, 2009). On the other hand, using Tobin's q, and CCC or NTC to measure the influence of financing policy of working capital on performance also show that firm performance is positively related to the relative degree of firm policy on aggressive financing in working capital (Nazir and Afza, 2009). This findings implicates that adopting aggressive approach in financing working capital and achieving higher levels of spontaneous and short-term financing in the balance sheet by firms are recognized and giving more values to by investors (Nazir and Afza, 2009).

Mohamad and Saad (2010) used current ratio as one of their variables to measure effect of working capital on firm performance. Their findings showed that current ratio and Tobin's q are negatively insignificant. This implies that current ratio do not affect any increase in firm performance represented by Tobin's q. It also indicates that reduction in current assets will lead to positive returns for the firms.

On other independent variables, one of the studies using Tobin's q and CCC finds leverage to be negatively related with firm value; which indicates that lower leverage will

lead to increase in firm performance (Vural et al., 2012). The firm's value will be adversely affected by an increase in the firm leverage. A positive relationship between CCC and firm leverage from Abuzayed (2011) study indicates that the longer the CCC, the higher the external financing needed by the firm, which results in incurring higher borrowing cost.

For optimal working capital level and financial constraints, Baños-Caballero, S., et al. (2013) stressed that since financing is essential for higher level of working capital, which signifies additional expenses, it is expected that a lower optimal working capital level firm should be financially constrained than firm with higher optimal working capital level. They found that NTC of more financially constrained firms are negatively significant base on all the classification they used, this indicate that these firms also held on a concave relation.

However, optimal working capital investments of firms depend on how they can bear financing constraints. According to the study of Baños-Caballero, S., et al. (2013), the present of financing conditions in their analysis shows that firms that highly financially constrained has lower optimal level of working capital compare to firms that have low financial constraints. The causes of this could be traced to their incurring of higher financing costs and more rationing of capital, because lower working capital investment indicate lower necessity for external financing.

In the context of this study, Ismail, Ibrahim, Yusoff and Zainal (2010) found that firms in Malaysia capital market are generally in financial constraints, which is caused by their retained earnings and cash flows fluctuations. This implies that easy accessibility of firms

to external funds are hinder by the existence of financial constraints, and financing of future investments by a constrained firm depends on retaining sufficient rations of its income flows.

In addition, the study of Mohamad and Saad (2010) showed that the performance of Malaysia listed companies is negatively related to their working capital. Their recommendations for further studies to improve their findings are based on increasing of sample size, usage of different variables as a proxy for working capital, and other control variables that will give a robust relationship between the selected variables and facilitate in revealing better performance of firms in Malaysia context.

## 1.2 RESEARCH QUESTIONS

1. How do working capital decisions affect firm performance?
2. How do working capital decisions and financial constraints of the firm influence firm performance?

## 1.3 RESEARCH OBJECTIVES

The objectives of this study are:

1. To examine whether working capital decision affect firm performance.
2. To test whether working capital decision and financial constraints influence firm performance.

## 1.4 SIGNIFICANCE OF THE STUDY

The contributions of this study are as follows:

1. This study is different from the previous studies on relation between working capital and corporate performance in Malaysia based on the number of firms and large firm-year for the observation.
2. It also contributes to previous studies by investigating whether financial constraints have impact on the optimal level of working capital investment of Malaysia companies.
3. This study also contributes to previous research on management of working capital by showing new proof of working capital management influencing firm performance by considering probable non-linearities of their relationship.
4. Usage of panel data method to estimate the models for the elimination of unobservable heterogeneity.
5. Dealing with the problems of endogeneity by applying Pooled OLS, fixed-effect, and random-effect.

## 1.5 SCOPE AND LIMITATION OF THE STUDY

The data used for this study are limited and applicable to non-financial firms in Malaysia. However, the results and the recommendations are useful for any non-financial firms, governments, financial analysts, researchers, managers, accountants and stakeholders.

## 1.6 ORGANIZATION OF THE STUDY

Chapter one contains introduction. Chapter two deals with the reviewing of literature. Chapter three discusses the methodology. Chapter four deals with the analyses of the data used for this study. Chapter five entails conclusion and recommendation of this study.

## 1.7 SUMMARY

Insights to the relationship between corporate performance, working capital management, and financial constraints have been given by this chapter. This serves as an introduction into the topic of discussion. The problem statement, research questions, research objectives, significance of the study, scope and limitation of the study, and organization of study are also discussed in this chapter.

# CHAPTER TWO

# LITERATURE REVIEW

## 2.0 INTRODUCTION

Previous chapter gives an insight on what this study entails through expatiating on the views of researchers on firm performance, working capital management and financial constraints; and issues arising from their studies. However, this chapter provides an overview of the findings of previous researches on corporate performance, working capital management and financial constraints. The purpose is to develop the expected relation between corporate performances, working capital and also frame out the probable impact of financial constraints on corporate performance. This chapter is divided into sections. Section 2.2 deals with the relation between corporate performance and working capital. Section 2.3 expatiates on the relation between working capital investment and financial constraints. Section 2.4 focuses on the influence of financial constraints on corporate performance. The relation between corporate performance and working capital while putting financial constraints into consideration is discussed in section 2.5. Section 2.6 discusses the previous studies on variables application. Meanwhile, the conceptual framework of this study will be depicted in section 2.7.

## 2.1 WORKING CAPITAL MANAGEMENT AND CORPORATE PERFORMANCE

Different researches have examined the extent of managing working capital, and review of previous studies showed that significant relationship exist between managing of working capital and firm performance by applying various variables for their analyses.

One of the instances of such studies is Shin and Soenen (1998). Their study was based on 58,985 US firm-year observation that covers the period from 1975-1994. Their findings showed that net- trade cycle, used as a proxy for working capital has a strong negative significant relationship with firm profitability. Their findings also indicated that companies with shorter Net-Trade Cycle will achieve higher stock returns. They recommend that for a firm to achieve shareholder value, it must maintain a low level of Net-Trade Cycle. On the study of Lyroudi and Lazaridis (2000), that based their study on the relation between working capital and performance of firms in Greek beverage and food industry. Their findings show that cash conversion cycle (CCC), quick ratios, and current ratios are positively related, and return on assets (ROA) and CCC are also positively related. CCC and profit margin are observed to be positively related, while leverage ratio is not related with CCC.

Deloof (2003) is of the view that huge amount of cash had been invested in working capital by many of the companies and it is expected that managing of the working capital of this companies would affect their profitability. His study found that accounts receivables, account payables and inventories are negatively related with gross operating income by examining of 1,009 non-financial firms in Belgium between the period of 1992-1996 using correlation and regression analysis. He recommended that shareholder value can be achieved by managers through plummeting account receivables days and inventories. On contrary, negative relationship between firms' profitability and account payable gives support to his hypothesis that companies that generate lower profits will take longer period to repay their creditors.

Eljelly (2004) empirically investigate the relation between firm's profitability and it's liquidity for a sample firms in Saudi Arabia. The study took cash gap and current ratio as a measure of liquidity. Using correlation and regression analysis, a negative relationship was found between profitability and liquidity, where current ratio was taken as measure of liquidity. At company level it was observed that cash gap (cash conversion cycle) is highly important as proxy for liquidity rather than using current ratio as measure of liquidity that affects profitability. At industry level it was observed that size have significant effect on profitability.

Padachi (2006) study the effect of cash conversion cycle, inventories days, accounts payable days and accounts receivables days on return on assets. Working capital requirements tendency of firms is also analyzed by this study for 58 small firms in the manufacturing industry in Mauritius from 1998-2003. Applying fixed effect and pooled OLS regression model, the results showed that higher investment in inventories and receivables are related with lower profitability. The results also indicate that there is higher propensity in financing short-term component of working capital.

Lazaridis and Tryfonidis (2006) also investigate the relation between corporate profitability and working capital management for 131 listed firms in Greece for the period 2001 to 2004. Their findings indicate a statistical significant relation between profitability using gross operating profit and working capital using cash conversion cycle. They stressed that the managers can achieve shareholders value by optimizing cash conversion cycle.

Khan, Shah and Hijazi (2000) conducted their study on 30 Pakistani non-financial listed firms to evaluate the influence of working capital management on profitability. Their findings indicate that firm's gross profit is significant and negatively related to Cash conversion cycle, days inventories and days payables. Their study cannot be really generalized across other sectors because of their narrow datasets.

Shah and Sana (2006) also investigate the relationship between firm's profitability and working capital, by making use of financial data of oil and gas firms in Pakistan from 2001-2005. Their findings suggested that financial managers can maximize shareholders' through efficient and effective management of working capital. Their findings showed that cash cycles, receivables, inventory conversion periods, and sales growth significantly move in reverse direction to profit margin. In addition, their study also evaluates the underlying relationship that establishes that profitability moves in positive direction with managing working capital efficiently.

Afza and Nazir (2007) examine the relationship that exists between conservative policy and aggressive policy of working capital for 205 listed companies in 17 industries in Karachi Stock Exchange from 1998-2005. Their findings indicate that firm's profitability and degree of aggressive working capital financing and investment policies are negatively related.

Ganesan (2007) examine the firms' efficiency in managing working capital in telecommunication equipment firms. He used current ratio, days' payable outstanding, days' inventory outstanding, days' sales outstanding, and days' working capital as proxies for working capital management, while income to sales, income to total assets,

and cash conversion efficiency are used as proxies for liquidity and profitability. His findings showed that despite negative relation between profitability and days' working capital, it does not have significant impact on firms' profitability.

These previous findings above showed that working capital management is therefore deemed as an important tool that facilitates the measurement of both the financial and operational efficiency of firm business. Raheman and Nasr (2007) evaluate the financial data of 94 listed Pakistani companies in Karachi Stock Exchange from 1999-2004. Their major result is that there is negative significant relationship between profitability and liquidity. Their study is in line with some previous studies because it reiterates the negative relation between working capital components and firms profitability.

Garcia-Teruel and Martinez-Solano (2007) evaluate the effect of working capital management on firms' profitability by analyzing the financial data of 8,872 Spanish companies from 1996-2002. Their findings indicated that efficient management of working capital contributing factors will increase profitability. They summarize their findings by stating that firms that are profitable ensure shorter CCC, pay dues early, and convert inventories to finished goods in less time.

An attempt have been made by Anand and Malhotra (2007) to establish objective metrics in measuring efficiency at firm and industry level by using data of 339 Indian firms between 2001-2004. Their findings showed reduction in firms' both CCC and operating cycles, but efficient working capital management and profitability is not positively related.

Samiloglu and Demirgunes (2008) examine the impact of managing working capital on profitability of firms listed on the Stock Exchange Istanbul, Turkey. After applying multiple regressions, their result indicates a negative relationship between inventory period, leverage, account receivables and firms' profitability. However, sales growth showed a positive relation with firms' profitability.

Zariyawati, Annuar, and Abdul Rahim (2009), investigate the relation that exist between profitability and working capital management of the firms in Malaysia by analyzing 1628 firm-year observation between 1996-2006. Using pooled regression model, the result showed that CCC is negatively significant with profitability of firms. It indicates that reducing of cash conversion cycle will increase firm's profitability.

Sen and Oruc (2009) examine the relations that exist between return on assets and firms efficiency level of the firms listed on Istanbul Stock Exchange. By applying random and fixed effect model for regression, their findings showed that firms net working capital level, cash conversion cycle, accounts receivable days, current ratio, and return on assets have a negative significant relationship.

Mathuva (2009) evaluates the influence of managing working capital components on firms' profitability by using sample of 30 firms listed on Nairobi Stock Exchange for the period 1992-1993 to 2007-2008. After using Spearman's and Pearson's correlations for correlation matrix, and fixed effects and pooled OLS models for regression, his study showed that a negative relation exist between profitability and debtors' age, while profitability has a positive relationship between inventory conversion period and creditors' age.

Nobanee and Al-Hajjar (2009) evaluate the effect of managing working capital on firms' profitability by analyzing 2,123 non-financial Japanese listed firms in Tokyo Stock Exchange from 1990-2004. They suggested that the profitability of the firm can be increased by firm managers through shortening of days' receivables, days' inventories, and cash conversion cycle. Their results also indicate that profitability could be increase through extension of the payables deferral periods. Though, firm's credit reputation could be damaged through extension of payables deferral period, and it may have long run effect on its profitability.

Chatterjee (2010) evaluates the significance of current fixed assets in running a successful organization, which will have direct influence on firm's liquidity and profitability. This has been a normal phenomenon that is observed in business where most firms increase profit or loss margin to shrink working capital size in relation to sales. However, any firm that is interested in improving or increasing its liquidity needs increase in working capital. So, the firm needs to reduce its sales which will affect its profitability. Based on this thought, 30 firms based in United Kingdom were chosen from London Stock exchange from the period 2006-2008. The findings showed that there is impact of working capital components such as average collection period, Inventory turnover, average days of payment, C.C.C, current ratios, on firms' profitability.

Charitou, Elfani and Lois (2010) investigate managing working capital effect on the firm performance of firms in a developing market. Their hypothesis is on working capital management influence increase in profitability. They use data collected from the firms listed on Cyprus Stock Exchange for the period 1998 - 2007. They used a multivariate regression analysis, which the results show support for their hypothesis. The results of

their findings indicate that the profitability of the firms is related to their cash conversion cycle and other main variables.

Dong (2010) finds that liquidity and firm's profitability are influenced by managing working capital. He used a pooled data to examine the firms listed on the Vietnam stock market for the period 2006-2008. The focus of his study is on the relation that exists between profitability variables, and conversion cycle as well as its related components. His findings showed that the variables are strongly negatively related. This indicates that any increase in cash conversion cycle will reduce the firm profitability. The findings of the study also show that decrease in the number of days inventories and account receivables will increase the profitability.

Gill et al. (2010) also studied the interaction between profitability and managing of working capital by evaluating 88 listed American firms in the New York Stock Exchange from the period 2005-2007. Their findings also show that the variables are significantly related.

Mohammad and Saad (2010) examine working capital management effect on firms' performance. They analyze 172 non-financial listed Malaysia firms on the Bloomberg database for the periods 2003-2007. They examined the influence of working capital variables dimensions by using CCC, current liabilities to total asset ratio (CLTAR), current asset to total asset ratio (CATAR), debt to asset ratio (DTAR), and current ratio (CR) as proxies for working capital, while Tobin's Q was used as a proxy for firm value, return on invested capital (ROIC) and return on asset (ROA) were used as proxies for firm profitability. Both correlations and multiple regressions were used to analyze the

data. Their findings show that the relation between firms' performance and working capital components is negatively significant.

Rimo and Panbunyuen (2010) examine the effect of firm characteristics on the management of working capital. Quantitative method was used to evaluate the relation between cash conversion cycle used as a proxy for working capital and firm characteristics of 40 Swedish firms listed on the Stockholm Stock Exchange. Financial data of these firms for 2007 and 2008, extracted from their financial statements were used for the study. Based on the outcome of regression analysis, the findings show that sales growth, operating cash flow, profitability, and company size are influenced by management of working capital. Their results also indicate that profitability and cash conversion cycle are significant and positively related. They also find that operating cash flow, firm size and growth opportunities are significant and negatively related to cash conversion cycle. The evaluation of the industry effect showed that the CCC is significant with a positive relation to four classifications of industry: industrials, materials, information technology and health care.

Ching, Novazzi & Gerab (2011) examine the relationship that exists between profitability and managing of working capital of firms listed in Brazil. They aim to investigate the difference firm profitability and managing of working capital in two different groups of firms: fixed capital intensive and working capital intensive; as well as identifying the components that most impacted on profitability. They used three different methods to measure profitability: return on equity (ROE), return on assets (ROA), and return on sales (ROS). Days' inventory, days' receivable, days of working capital, debt ratio, and cash conversion efficiency are used as independent variables. Based on the results of the

multiple linear regressions, profitability is negatively related to debt ratio and cash conversion cycle.

Saghir, Hashmi and Hussain (2011) examine the relation that exist between profitability and the managing of working capital of 60 textile companies listed in Karachi Stock Exchange from 2001 to 2006, which indicate 360 firm-year observations. Their objective of studying is to find the statistical significant relation that exists between profitability and CCC and its major variables. The results of their findings showed that profitability has a statistical negative significance relationship with CCC. Its indicates that companies profitability can increase if the cash conversion cycle is properly handled and optimum level days' account payables, days' accounts receivables, and days' inventory is always maintained by the managers.

Singh (2011) evaluates working capital management efficiency of the companies from cement industry in India. Descriptive, correlation and regression analysis are used to evaluate the relation that exist between net working capital level, other working capital management measures and the proxy for profitability (return on capital employed). The study used data of 11 firms selected randomly from cement industry in India. 12 years financial statement of these 11 firms was collected from 1999-2010, indicating that 132 firm-year observations are applied for the study. The findings indicate that firm profitability and days' payable outstanding are negatively related, which is different from previous studies. The findings also showed that there is no relation between CCC, days' sales outstanding and profitability of the firm in India cement industry. Furthermore, the study indicates that net working capital measures liquidity comprehensively and effectively if it is properly managed by the cement industry firms.

Garcia (2011) examines the effect of managing working capital and its variables on the profitability of European companies. In measuring profitability and working capital, he applied Gross operating Profit and CCC respectively. The sample size for the research is 2,974 listed non-financial firms in 11 of European Stock Exchanges from 1998-2009 (12 years period). By applying both GLS and OLS in regression analysis, the findings showed Receivables Collection Period, Inventory Conversion Period, Payables Deferral Period and CCC are negatively significantly related to Profitability. This findings implicate that there can be improvement in the profitability of companies if the time span of tying up working capital in the company is reduced. The result of the findings also showed that profitability and liquidity proxy by Current Ratio are inversely related. Meanwhile, additional regression analysis made indicated that differentiated influence of the Cash Conversion Cycle on operating profitability is caused by different levels of liquidity.

Ali (2011) examines the relation that exists between profitability and managing working capital of Pakistan's textile industry. The efficiency in working capital management was measured in this study through application of three variables namely: days of working capital, days operating cycle and cash conversion efficiency. Meanwhile, profitability was measured by using return on assets, economic value added, profit margin on sales, and return on equity. The analysis covers 160 textile firms' panel dataset for a five-year period from 2000-2005 using an ordinary least squares and fixed effect model for estimation. The result showed that return on assets is significant and negatively related with average receivable days and average payable days, but significant and positive relation with average days in inventory. A positive significant relation also exists

between return on assets and CCC. This indicates that a longer CCC can result in more profitability for the textile industry. The regression analysis findings indicate that return on assets is significantly and economically influenced by average days receivable, average days payable, and average days in inventory. The fixed effect regression findings indicate that both average receivable days and average inventory days influenced return on assets significantly.

Bagchi, Chakrabarti and Roy (2012) evaluate the impact of managing working capital on Profitability in Indian Fast-Moving Consumer Goods (FMCG) Companies. The aims of studying is in determining the effects of managing working capital components such as CCC, debtors' age, inventory days, creditors' age, debt equity ratio and debt to total assets on FMCG firms' profitability. They measured firm profitability using return on total assets and return on investment. The secondary data used for their analysis was for the period 2001 to 2010, retrieved from the Prowess Database of CMIE. Aside applying Pearson's correlation analysis, they also apply both pooled OLS and fixed effect LSDV model for the panel data regression analysis. Their findings showed a durable negative relation between firms' profitability and working capital management variables. Their finding also proves how better fixed effect LSDV model in explanation of regressed variables is than pooled OLS model.

Ali and Ali (2012) evaluate data of six years from 15 companies in 3 different sectors that are listed in Karachi Stock Exchange for the periods 2003 to 2008 obtained through State Bank of Pakistan official website. The researchers also studied and compared 15 research articles of different authors. Their aim is to prove whether profitability is really affected by working capital management, using Pakistan as a case study. Their result supported

the hypotheses and show that working capital has an impact on profitability. They suggested that for sufficient and effective working capital, companies should make sure that their currents asset components specifically receivables is improved. Firms' profitability can be enhanced by inventories efficient and effective management. They concluded that higher profitability ratio will be achieved by firms that possess higher working capital, and higher profitability ratio will also be achieved by firms that possess higher total assets. Firms with adequate total assets also possess enough working capital. Thus, firms that possess an adequate working capital proportion will have positive effect on its profitability and total assets.

Napompech (2012) examines effect of managing working capital on Thai Listed Companies' profitability. A regression analysis was made on a panel data of 255 companies listed in Stock Exchange of Thailand from 2007-2009. The results of the findings showed that inventory conversion period and receivables collection period are negatively related to gross operating profits. This indicates that the profitability of the firms can be increased by the managers through shortening of inventory conversion period, cash conversion cycle, and receivables collection period. On the other hand, profitability of the firms cannot be increased by lengthening deferral period of the payables.

Ray (2012) examines the relation between profitability and the components of working capital management of 311 firms in India manufacturing industry from 1997-2010 (14 years). The variables used as measures of working capital management are ratio of financial assets to total assets, firm size, debt ratio, current ratio, CCC, average payment period, inventory turnover days, and average collection period; while the proxy for

profitability is net operating profitability. The findings showed that there is a robust negative relationship between corporate profitability and the components of working capital management, which include CCC, accounts receivable days and financial debt ratio.

Tufail, Sidra and Amjad (2013), investigate the working capital management impact on firms' profitability in Pakistan textile industry. The aim of their study is to evaluate the influence of working capital policies on firms' profitability. Ratios of current liabilities to total assets and current assets to total assets are used as measures of working capital financing policy and working capital investment policy respectively; while return on assets is used as a proxy for profitability. The data for the study comprises 117 listed textile companies in stock exchange of Karachi from 2005-2010. The findings indicate that profitability and aggressive policies of working capital are significant and negatively related. Meanwhile, profitability, firm size and liquidity are positively related whereas profitability and debt to equity ratio are negatively correlated.

Golas, Bieniasz and Czerwinska-Kayzer (2013) examine the relationship between profitability and working capital of 30 branches of firms in the food industry in Poland for the period of 2005 to 2009. Return on assets is used to measure profitability, while cash conversion cycles, receivables, liabilities, inventories, are used as measures for working capital. The findings showed that there is strong impact of length of inventory and liabilities cycles on profitability. This indicates that the shortest the CCC, the higher the return on assets.

There is wide acceptance that firm value is affected by efficient and effective management of working capital, however the empirical prove on working capital investments valuation effects is limited in some areas. One of the aims of this study is to contribute to the previous study on management of working capital by evaluating its influence on the performance of firms, in Malaysia context. Some of the findings are summarized below in table 2.1.

Table 2.1: **Summary of some previous findings**

| **Author** | **Variables** | **Methodology** | **Findings** |
|---|---|---|---|
| Shin & Soenen (1998) | Adjusted Stock return and NTC | 58,985 US firm-year observation from the period of 1975-1994 obtained from COMPUSTAT. | Working capital is negatively related with profitability |
| Lyroudi & Lazaridis (2000) | ROA,CCC, net profit margin, interest earned ratio, current ratio, quick ratio, debt ratio | Greek beverage and food industry. Regression and correlation analysis, and t-tests. | CCC positively related with ROA and net profit margin |
| Deloof (2003) | CCC, Gross operating income, account receivables days, account payables days, Inventories, Sales growth and financial debt | 1,009 non-financial firms in Belgium. Regression and correlation analysis | Gross operating income, account receivables days, account payables days and inventories are negatively significant. |
| Eljelly (2004) | Cash Gap, Current ratio, Net Operating Income, Total Assets and Net | Correlation & regression analysis of Joint stock firm in Saudi Arabia | Firm's Profitability relation with its liquidity is negatively significant. CCC is a better measure of liquidity than current |

| | | | |
|---|---|---|---|
| | Sales | | ratio (CR) |
| Padachi (2006) | Accounts receivables days, inventories days, accounts payable days ,CCC and ROTA | Applying fixed effect regression model and pooled OLS to 58 small manufacturing firms in Mauritius. | A significant strong relationship between profitability and working capital. Also showing increase in the trend of short-term component of financing working capital. |
| Lazaridis and Tryfonidis (2006) | Gross operating profit and CCC | Correlation & regression analysis of 131 firms listed in Stock Exchange of Athens for the period of 2001-2004. | Negative significant relation between Gross operating profit and CCC. |
| Khan, Shah, & Hijazi (2006) | Gross Profit, Days Inventory, Days Payables and CCC | Correlation & regression analysis of 30 non-financial firms listed in Pakistan Stock exchange. | Negative significant relationship between CCC, DI, DP and Gross Profit. |
| Shah & Sana (2006) | Profit margins, CCC, Sales growth, account receivables and Inventory conversion period | Correlation & regression analysis of oil & gas firms in Pakistan. | Negative significant relationship between CCC, account receivables, Inventory conversion period, sales growth and profit margin. |
| Afza & Nazir (2007) | Tobin's q, ROA, ROE, Current Assets, Current Liabilities. | Correlation & regression analysis of 205 listed companies in Pakistan from 1998-2005. | Firm's profitability and degree of aggressive policies of investing or financing in working capital are negatively related. |
| Ganesan (2007) | Days Sales Outstanding (DSO), Days Inventory | Correlation & regression analysis of 443 annual financial statements | Firm Profitability and days working capital are negatively related but not |

| | | | |
|---|---|---|---|
| | Outstanding (DIO), Days Payable Outstanding (DPO), Days Working Capital (DWC), Current Ratio (CR), Cash Conversion Efficiency (CCE), Income to Total Assets (IA) and Income Sales (IS) | of 349 telecommunication equipment firms in US from 2001-2007. | significant. |
| Raheman & Nasr (2007) | Average collection period, CCC, Current ratio, and Net Operating assets. | Pearson correlation & regression analysis of 94 firms in Karachi Stock Exchange, Pakistan from the period 1999-2004. | Working capital variables and firm's profitability are negatively related and significant. |
| Garcia-Teruel & Martinez-Solano (2007) | CCC, Account, Receivables, Account Payables, SIZE, GROWTH, DEBT, GDPGR | Univariate and Multivariate regression analysis of 8,872 SME companies in Spain from 1996-2002. | Reducing of inventories by managers could create value for firm, and shorter CCC improves firm's profitability. |
| Anand & Malhotra (2007) | CCC, Day's operating Cycle, GROWTH | Objective metrics for measuring efficiency of 339 firms in India from 2001-2004. | Little proof of positive relation between firm profitability and working capital. |

## 2.2 INVESTING IN WORKING CAPITAL AND FINANCIAL CONSTRAINTS

Sensitivity of investing in working capital to financial constraints is greater than that of investing on fixed assets (Fazzari & Petersen, 1993). As a result of this, since there is

need to finance a positive level of working capital, it is expected that working capital optimal level must be lower for firm that is highly financially constrained. Based on this thought, empirical prove has shown that working capital investment depends highly on financing conditions of a company.

Hill, Kelly, & Highfield (2010) examine the behavior of net operating working capital. They evaluate their study using a unbalanced panel data sample set of 3,343 firms from the Compustat database from the period of 1996 to 2006, equaling  observations of 20,710 firm-year. They integrate components to examine the factors that influence the net investment in operating working capital by applying working capital requirement. The result of their findings showed that mean working capital requirement (WCR) is averagely 23% of capital structure. The results of the statistic indicates that there is need for closer scrutiny of working capital behavior, specifically based on the findings of Fazzari and Petersen (1993) that fixed investment is reduced by increasing net working capital, while proving that the cash conversion cycle is negatively related to risk-adjusted returns and profitability (Deloof, 2003; Shin & Soenen, 1998). It indicate that financing capabilities influenced working capital behavior, since WCR has a direct relationship with size and operating cash flow, and an inverse relationship with financial distress and market-to-book ratio. However, WCR and market share is weak and negatively correlated. The outcomes of these results indicate that firms that have inadequate access capital market, insufficient internal financing capability, and high external financing costs will use payables more aggressively better than inventory and receivables. The evidence of the findings indicates that financing and operating conditions should be deliberated upon when appraising working capital behavior.

Fatemeh and Baghiyan (2013) evaluate the relationships between financing constraints and investment in fixed and working capital of listed companies in the Tehran Stock Exchange in Iran. A panel data of 134 stock companies over the period of 2005 to 2011 was collected and regressed. The results of the their findings indicate that an efficient and effective management of working capital may aid companies in alleviating financing constraints effect on fixed investment.

Wasiuzzaman and Arumugam (2013) examine the determining factors of investment levels in net operating working capital of listed firms in Malaysia. The data sample for the study was collected from 192 firms from 2000-2007 (8 years), while applying OLS regression analysis. The findings indicate that during economic expansion, smaller and younger companies with lower tangible assets, higher immediate sales growth, low leverage, stable revenues, little levels of information asymmetric and higher operating cash flows will likely achieve maximum operating working capital investment. The board characteristics such as independence of the board and size are insignificant to firms' investment in working capital.

Chan (2008) evaluates the relationship between financial constraints, firm dynamic behavior and working capital. Developing a model of simple working capital and financial constraints. The awareness of the influence of financial constraints on the company's operations which are not considered by existing models are provided by the models, through putting into account the necessity in financing both investment and working capital, and the likelihood of financing from funds generated internally. At first, the model showed that optimal factor ratios to demand shocks response is distorted by financial constraints, which is in addition to the scale inefficiencies affected by

suboptimal output levels constrained. Binding constraints makes investment to be countercyclical to shocks. This will not only lead to lower profits but generating cost of a dollar in revenue are more for firms in constrained than the unconstrained firms. Secondly, this will not only lead to the constrained company achieving less earning in each period, but growth and production are negatively affected by the suboptimal revenue level generated over the period. Thirdly, the firm is prevented from benefiting from production opportunities by financial constraints. Financing demand and inputs demand are related by the working capital model. Financial constraints affect firm when the firms wish to expand, but are not affected during contraction periods.

Ding, Guariglia & Knight (2010) examine the relationships that exist between fixed capital and working capital investment, and financing constraints with a panel data of more than 120,000 Chinese companies managed by various representatives from 2000-2007. The study reveals that high working capital firms achieve high working capital investment sensitivities to cash flow (WKS), as well as low fixed capital investment sensitivities to cash flow (FKS). Firm-level FKS and WKS measures were also constructed and analyzed. The findings showed that in spite of austere external financing constraints, highest rates of investment is achieved by firms with high WKS and low FKS. This indicates that efficient and effective working capital management may aid companies in alleviating the impact of financial constraints on firm investment.

Azam and Shah (2011) evaluate the influence of both internal financing constraints and external financing constraints on choice of investment. The data for the study was collected from nine sectors which contains 52 firms listed in the stock exchange of Karachi. These sectors include: Cement, Industrial metal and Mining, Fixed line

Telecommunication, Oil and Gas, Chemicals, Tobacco, Sugar, Textile, Pharmaceutical & Bio Technology sectors. The data collected was for the period 2004-2010. The multiple regression analysis was done to evaluate the relations that exist among investment, firm's age, dividend payout ratio, and firm size. The results showed that investment and firms' size are positively related, while investment and firms' age are negatively related. It also shows that investment and dividend payout ratio are negatively related; indicating that a firm that grows high or old dividend payout ratio will spend less in expansion than firms with young or old dividend payout ratio.

Guariglia (2007) examine the difference of extent of investment sensitivity to cash flow in companies with different external and internal levels of financing constraints by using panel sample data of 24184 firms in United Kingdom from 1993 to 2003. The result indicates that the relation between cash flow and investment is U-shaped when the sample is separated base on the internal fund level accessible to the company. Conversely, investment sensitivity to cash flow increases with the level of external financing constraint encountered by firms. The combination of the internal and external financing constraints shows that firms that encountered more external financial constraints and high internal funds level depend more on cash flow for investment than dependence on cash flow

## 2.3 IMPACT OF FINANCIAL CONSTRAINTS ON CORPORATE PERFORMANCE

Access to finance is indisputably a vital source for better firm performance and economic growth. Firms that have sufficient access to finance are often more productive. Boermans and Willebrands (2012) examine firm performance under financial constraints and Risks, using micro finance clients in Tanzania as a context. The objective of their study is to evaluate how financial constraints as well as the way in which entrepreneurs cope with risk that affect their business. The study analyzes the influence of financial constraints on firm performance based on an exclusive sample of entrepreneurs who have restricted access to micro credit. Based on new evidence collected among 653 small business owners in Dar es Salaam, Tanzania, several financial constraint measurements was utilize which include unique information derived from the micro finance institute (MFI). The study include a detailed set of covariates that have been often omitted in other studies such as asset wealth, household size, consumption and the entrepreneur's risk taking predispositions and apply a wide range of robustness tests. The main finding is that financial constraints are a key determinant of firm performance and severely limit profitability of micro and small enterprises (MSEs). Risk perception is associated with better firm performance while the reverse holds for risk taking propensity.

Ahmed and Hamid (2011) examine the determining factors for firm growth, specially the level of which financially constrained firm grow, more also exploring the determining factors of access to external financing in Pakistan. The data used for this study were retrieved from the 2$^{nd}$ part of the Investment Climate Assessment Survey that the World Bank conducted in 2007. An instrumental variable method was used to analyze the effect

of access to external financing on company growth while applying a probit model for exploring the determining factors of access to external financing. The findings indicated the following: Firstly, finance as become a mandatory constraint to the growth of firms in Pakistan because an increase of 10 percent in financing working capital through external funding is expected to averagely increase annual growth rate by 5.6 percent. Secondly, financial deepness is essential for access all over the country. Access is better in an environment with better saturation in financial infrastructure. Thirdly, some of the internal factors like organizational form, quality of human capital, export status, and size appear to be essential determinants of access to external financing in Pakistan.

Crisóstomoa, López-Iturriagab and Valleladob (2012) investigate the presence of financial constraints in investing in Brazil and the specific firm size effect on it. A sample data of 289 nonfinancial Brazilian firms from 1995 to 2006 was used to estimate an active investment models. The findings indicated that firms in Brazilian face financial constraints since their investment depend on internally generated funds. Firm size has shown to be, effectively, an important determinant of it. The sensitivity to cash flow of smaller firms in investment is higher than that of larger firms. At the firm level, the findings suggested the need for further developments on information disclosure as a way to mitigate asymmetric information problem. At the policy level, additional advance in the institutional environment might also be important for minimizing financial constraints for Brazilian firms.

Fazzari et al. (1988) (as cited in Ismail et al, 2010 and Baños-Caballero et al, 2013) reveal that financing is one of the issues that are affecting investment. The existence of financial constraints is explained by this finding. Shaller (1993) discover that only some

certain firms in Canadian market are affected by the presence of financial constraints. The study of Barran and Peeters (1998) showed that the investments of Belgian firms' depend on financial factors; this suggested that financial constraints exist in Belgian market. Cleary (2006) reveals that seven largest economies have the presence of financial constraints in their economy; these countries include: United States, United Kingdom, Japan, Germany, France, Canada, and Australia. The findings of Kadapakkam et al. (1998) revealed that availability of internal fund and investment of six Organization for Economic Cooperation and Development (OECD) countries are negatively related. These countries include Japan, France, United Kingdom, Germany, Canada, and United States.

A panel data constructed by Bond et al. (2003) on manufacturing companies in Germany, France, Belgium, and the United Kingdom show the presence of financial constraints in these countries but relatively high in the United Kingdom. Bougheas et al. (2003) reveal that investing in R&D is faced by financial constraints in Ireland Republic. Their study is in line with previous studies on US firms such as Himmelberg & Petersen (1994), Hao & Jaffe (1993), and Hall (1992).

Chen (2007) examine how sensitivity of investment-cash flow varies among firms encountering different external and internal levels of financial constraints, and firms owned and not owned by state, using a panel data of 815 listed Chinese firms from 1998 to 2004. All the firms based in various geographical locations. The results of the findings indicate that firms that is encountering less internal financial constraints achieve more sensitivity investment-cash flow, while firms that encountered more external constraints achieve more sensitivity investment-cash flow. State owned firms depend less on cash flow for investment, specifically the large firms, while non-state owned firms depend

more on cash flow for investment. Stronger and significant financial constraints is encountered by companies in the central and eastern part of China, while firms in the western part of China face weak and significant financial constraints, which is narrowly associated to the regional development policy of China.

Ding et al. (2010) examine the relationship among working capital, investment, and financial constraints, using sample data of 12000 firms in China from 2000 to 2007 by constructing sensitivities of firm level to cash flow. Their findings indicate that larger and older firms have presence of fluctuations, while allowing growing firms, the internal financial constraints is bear by firms with less cash flows and active in the adjustment of fixed and working capital investment.

Fazzari and Petersen (1993) highlighted another benefit of working capital, by stating that it facilitates the smoothing of firms fixed capital investment in the existence of shocks in cash flow. Since high adjustment costs characterized fixed capital investment, smoothing of fixed investment bring benefit for firms. However, when there are financing constraints and negative shocks in cash flow, it is only firms with adequately high working capital levels that can engross these shocks without reducing fixed investment.

Ismail et al, (2010) examine the firm investment and financial constraints in Malaysia. They evaluate the relationship between investment and cash flow by applying annual data from 1988 to 2005; their results indicate that financial constraints exist in the capital market of Malaysia. Though, the level of strictness is comparatively low, showing that no accessibility to external fund for firms. Therefore, their findings reject the neoclassical investment theory that based is assumption on complete information, stressing that only

the factor of technology and prices can determine firm's anticipation for stock capital. Finally, fluctuation in retained earnings and cash flows strongly affect their investments. They also found that the realization of monetary policies in enhancing economic growth is determined by the existence of financial constraints, since financial constraints expand the shocks instigated by the policies especially the unexpected monetary policies (Kocherlakota 2000). Thus, Agung (2000) recommends to the governments to take precaution when implementing any policy that will result in financial constraints and lead to deteriorating of the present economic conditions.

## 2.4 CORPORATE PERFORMANCE, WORKING CAPITAL MANAGEMENT AND FINANCIAL CONSTRAINTS

Baños-Caballero et al., (2013) examine the association between corporate performance, working capital management and the sensitivity of optimal level of working capital to different financial constraints measures. A sample data of UK non-financial listed firms were used for the study. Contrary to prior studies, the results offer solid backing for existence of an inverted U-shaped relationship between firm performance and working capital investment, indicating the presence of investing in optimal level of working capital that offsets benefits and costs, and maximizes shareholder's value. The findings recommended that negative implications on corporate performance should be avoided by managers due to loss of sales and loss of discounts in early payments, and or other financing expenses. They also find that more financially constrained firms achieve lower optimal level of working capital.

Kieschnick et al., (2011) attempted to evaluate the relation between shareholders' value and managing of working capital. Their findings demonstrate that the worth of investing one dollar on working capital has a significant impact on the expected future sales, financial restrictions, and debt pressure of the company. Furthermore, compared to investing more in inventory, investing more in increasing the limit of credit given to customers has a greater effect on the wealth of shareholders. Michalski (2010) studied the levels of investing in operational cash. They maintain that cash assets management is a complex process. On one side, when surplus cash is invested in working capital, the companies faces high cost of its maintenance, and on the other hand, this can help increasing sales revenue.

However, the more increase in firm working capital, the more experience of financial distress, as well as bankruptcy threat. This prompts firms that maintained high working capital investment incentives to minimize their levels of working capital, and reduce financial distress risk and high cost of bankruptcy. Also, keeping of high levels of working capital indicate locking up money in working capital (Deloof, 2003), thus, large working capital investment could hamper firms ability to engage in additional value-enhancing projects. These effects of working capital that have positive and negative sides indicate that the decisions in working capital encompass a trade-off. Thus, this is expected for firms in order to achieve an optimal level of working capital that offset these benefits and costs, and also maximizes their shareholder value. Obviously, it is also expected that an increase in working capital should increase corporate performance till a certain level of working capital is achieved. Conversely, it is expected that, away from this optimum, firm performance and working capital relationship will be negatively

significant. This study tends to contribute its quota to this assertion in the context of Malaysia companies.

## 2.5 DISCUSSION ON FIRM PERFORMANCE, WORKING CAPITAL MANAGEMENT AND FINANCIAL CONSTRAINTS VARIABLES

There are diverse views on the measurement of corporate performance or firm profitability. Garcia-Teruel & Martinez-Solano (2007), Samiloglu & Demirgunes (2008), Nazir & Afza (2009), Sharma & Kumar (2011), Bagchi et al., (2012), Azam and Haider (2011), and Uyar (2009) use return on asset as a measure of profitability. Padachi (2006) justify this usage when he stressed that return on asset is a better proxy for profitability because it is related to the asset of the organization. Most of their findings show a negative relationship between working capital variables used in their studies [Padachi (2006); Garcia-Teruel and Martinez-Solano (2007); Deloof (2003); Zariyawati et al. (2009); Raheman and Nasr (2007); and Sharma and Kumar, (2011)].

Another group of studies believe that the best measurement for corporate performance or firm profitability is by using net operating profit [Ashraf (2012); Ray and, (2012); Raheman et al (2010); Oladipupo and Okafor (2013); Gakure (2012); and Rehn (2012)]. It is calculated by summing up the operating income with depreciation and amortization and dividing it with the subtraction of financial assets from total assets. They argued that return on asset should not be regarded as a measure of profitability because there will be little contribution from operating activities to return on assets in a situation where a firm balance sheet consist of mainly financial assets (Ray, 2012). The findings in these various

studies showed a negative relation between the operating profit and working capital variables applied for the models.

Furthermore, another group of researchers believed that corporate performance should be calculated as the ratio of the sum of the market value of equity and the book value of debt to the book value of assets (Agrawal and Knoeber, 1996; Himmelberg, Hubbard, and Palia, 1999; Thomsen, Pedersen, and Kvist, 2006; Florackis, Kostakis, and Ozkan, 2009; Wu, 2011; Baños-Caballero, S., et al., 2013). This is referred to as Tobin's q. It gives a comparison to the value of the company provided by financial markets with the value of its assets (Nasir and Afza, 2009). They argued that this variable alleviates many of the inadequacies innate in accounting profit ratio. This is because accounting profit ratios is affected by accounting practices, and firm risk which is appropriately incorporated by capital market valuation minimizes any misrepresentations introduced by accounting conventions and tax laws (Baños-Caballero, S., et al., 2013; Smirlock, Gilligan, & Marshall, 1984). However, according to Perfect and Wiles (1994) (cited by Baños-Caballero, S., et al., 2013), there are limited improvements on this variable acquired through Tobin's q estimation which are related to replacement costs.

For working capital variables, Cash Conversion Cycle (CCC) and Net Trade Cycle (NTC) are used interwoven. However, one of the broad measures of working capital management is Cash Conversion Cycle (CCC) (Ashraf, 2012; Ray 2012). CCC is used as a comprehensive of working capital because it gives details of the time frame amidst the disbursement that is made for the procuring of raw materials and the assorting of sales of finished products. Thus, the longer this time frame, the larger is the investment in working capital blocked (Bagchi et al., 2012).

Moreover, Cash Conversion Cycle can also be refer to as an appendage in the evaluation of working capital because it indicates the numbers of days a company will be in need of extra funds for the financing of its current assets. A shorter cash conversion cycle is better for a company because as costs of financing activity decreases then the money used to provide current assets will return faster (Gołaś, Dorota, Czerwińska-Kayzer and Bieniasz, 2012).

Therefore, by combination of the essential components of a company's liquidity couple with the short term operating efficiency, CCC can be maintained to be working capital management core variable. Though, Shin and Soenen (1998) (cited in Karadagli, 2012) proposed Net Trade Cycle (NTC) as a similar substitute measure of working capital management to CCC. NTC also focuses on the three core components of working capital specifically the accounts receivable, inventory and the accounts payable but it is different from CCC because it (NTC) measures all the components of CCC as a percentage of sales.

According to Nobanee (2010), NTC is easier to calculate and not so complex compare to CCC because of the situation of expressing all its components as a fraction of sales. In addition, the property of NTC enables it to be an alternative for extra working capital needs as a function of the projected sales growth (Gill et al., 2010). It also makes estimation of the financing needs of working capital expressed as the function of the expected sales growth easy and with confidence by the working capital manager (Nobanee and AlHajjar 2009; Karadagli, 2012).

However, the findings of Karadagli (2012) indicates that firm performance will improve in terms of both the operating income and the stock market return by an increase in both the CCC and the NTC for SMEs while for bigger companies a decrease in CCC and NTC is associated with enhanced profitability.

Another limitation of using CCC as a measure of working capital is that it does not put into consideration some current liabilities items such as interest, taxes and payroll. These items may also create a significant influence on the liquidity of a company (Cagle, Campbell and Jones, 2013).

Various studies have used some independent variables along with the main variables of working capital in order to support the analysis of working capital management on the profitability of firms (Lamberson, 1995; Smith and Begemann, 1997; Deelof, 2003; Eljelly, 2004; Teruel and Solano, 2005 and Lazaridis and Tryfonidis, 2006). They are also used by some previous studies in the performance model to control for other possible impacts on the firm performance (Baños-Caballero, S., et al., 2013).

These variables are opportunity growth (GROWTH), leverage (LEV), return on assets (ROA) and firm size (SIZE).

Meanwhile, on the financial constraint, in previous studies several measures have been used to separate firms that are suffering from financial constraints from those that are not, but there is still the problem of which one is the best for measuring. Fazzari et al. (1988) and Baños-Caballero, S., et al. (2013) used **dividends** to identify a firm's degree of financial constraints. They argue that financially constrained firms tend not to pay dividends (or to pay lower dividends) to reduce the probability of raising external funds

in the future. Almeida, Campello, and Weisbach (2004), Faulkender and Wang (2006) and Baños-Caballero, S., et al. (2013) also measure financial constraint based on **dividend payout ratio**. They believe that firms with a dividend payout ratio above a certain sample median are less financially constrained than those with a payout ratio below the certain sample median.

Moyen (2004) and Baños-Caballero, S., et al. (2013) categorized financial constraint firms based on their **cash flow**. They argue that this variable will allow someone to focus on the firm's beginning of funds. It is the ratio of earnings before interest and tax plus depreciation to total assets. Firms with a cash flow above a given sample median are assumed to be less likely to involve in financing constraints.

**Size** is another variable used as an inverse proxy of financial constraints. They argue that smaller firms face higher agency costs and informational asymmetry and, therefore, will involve more financing constraints (Almeida et al., 2004; Carpenter, Fazzari, & Petersen, 1994; Faulkender & Wang, 2006; Baños-Caballero, S., et al, 2013). Since larger companies have better prospect in the capital market, they face lower costs of external financing and lower borrowing constraints. In this regards, firm will be separated base on their size, measured by the natural logarithm of sales. It will be assumed that firms with size above (below) the sample median to be less (more) likely to be financially constrained. Hence, it is important to study whether financial constraint proxy by size is significant in explaining the relationship between corporate performance and working capital management.

## 2.6 SUMMARY

Previous studies on the topic of this study have been discussed elaborately in this chapter. The empirical findings of different researchers and different methodologies have been explained vividly in this chapter. This entails a comprehensive breakdown of what previous studies have found on this topic.

# CHAPTER THREE

# METHODOLOGY

## 3.0 INTRODUCTION

Previous chapter expatiate on the findings of various authors that evaluate the impact of working capital and its relationship with corporate performance; and also those authors who put financial constraints into consideration when examining this impact and relationship. This chapter discusses the variables used for this study, followed by the theoretical framework; development of hypotheses is discussed, and followed by the specification of model.

## 3.1 DESCRIPTION OF VARIABLES

This study measures corporate performance as the dependent variable by using Tobin's q. The measure is in line with previous studies such as Baños-Caballero, S., et al. (2013), Wu (2011), Ozkan (2009), Florackis, Kostakis, & Ozkan (2009), Thomsen, Pedersen, & Kvist (2006), Himmelberg, Hubbard, & Palia (1999), and Knoeber (1996). Net Trade Cycle (NTC) and Current Ratio (CR) are the main proxies for working capital management. Both variables have also been used together or separately by previous studies such as Shin and Soenen (1998); Baños-Caballero, S., et al. (2013); Lyroudi & Lazaridis, (2000), and Mohamad & Saad, (2010). Net trade cycle is regarded as a dynamic measure of continuing liquidity management that make available an easy estimation of additional financing requirements with respect to working capital, a shorter NTC indicate a lower investment in working capital. Meanwhile, current ratio (CR) is one of the traditional and major indicators of firm liquidity. A higher current ratio indicates a company with a better liquidity position. Higher current ratio could be

attained by maintaining current assets (CA) at high level or current liabilities (CL) at low level.

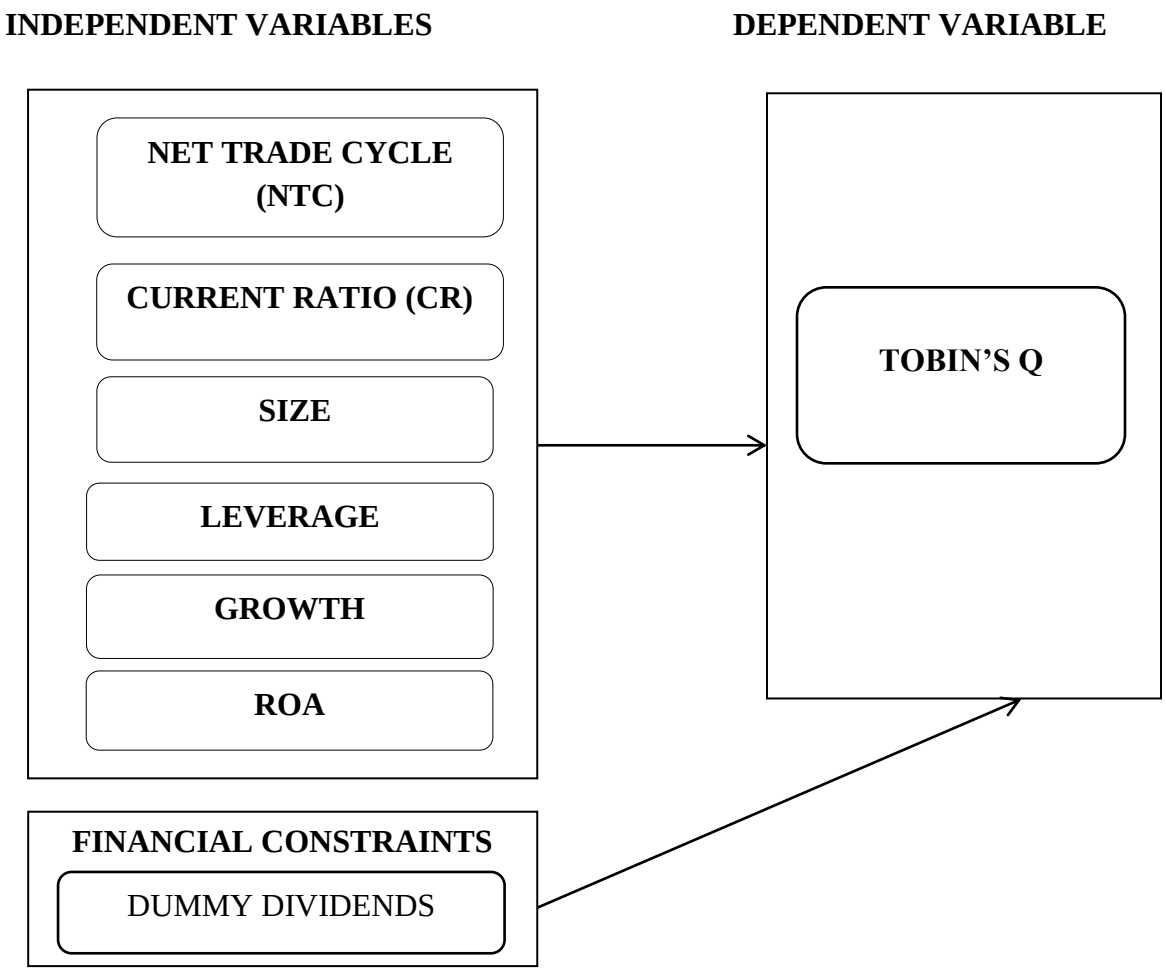
Other independent variables are firm size (SIZE), leverage (LEV), opportunity growth (GROWTH), and return on assets (ROA). Based on firm size, it has been proven by previous studies that a positive significant firm size influenced firm's profitability (Abuzayed, 2011; Su, 2001; Peel & Wilson; 1996; and Chan, 1993). This is because large firms that possess higher credit worthy can assess capital through the stock market more easily, which will make them always keep cash at low level. Thus, larger firms commonly enjoy more easy way to growth opportunities that eventually leads to positive performance. On the side of the opportunity growth, it has been also demonstrated by previous studies that short-term investment and cash holding of a firm will increase when there is more future cash flow fluctuations and more opportunities for growth (Abuzayed, 2011; Opler et al., 1999; Kim et al., 1998); this growth would increase performance of firms. On leverage, the perking order theory stated that a firm that lack funds will like to raise funds internally before attempting to borrow externally or issue new stocks (Myers, 1984). Hence, firms keep their own available capital for internal utilization and /or for debt payments. Firms with more debt will have low internal capital for their business operations, which will increase firm risk, while the projected debt ratio and market value are negatively related. However, this may persuade the capability to raise fund and improve profitability. For return on assets (ROA), it has been widely used as a measure in determining the intensity and level of returns generated by a firm through engaging its total assets. Firms are comfortable when they are able to attract more lenders and investors, but in distress if there is necessity for them to raise the funds needed for capital

projects and growth, or if their level of ROA could not convince or attract financiers. The earnings acquired through capital invested reflected on ROA. Thus, the asset turnover ratio of a firm increases when there is reduction in investment in working capital, which will in turn increases ROA. As this situation occurs, the return on equity (ROE) increases, and it will have positive effect on the shareholder value.

Financial constraint is measured by using the dummy variable of dividend (DDIV). As investment of a firm depends on various financial constraints such as internal finance availability, financing cost, or capital market accessibility (Fazzari et al., 1988), dividend policy of firms in financial constrained tend to be on two options of either paying lower dividends or not paying dividend at all, in order to lessen the possibility of the need for external financing in the nearest future.

## 3.2 THEORETICAL FRAMEWORK

The conceptual framework for this study is depicted below:



The measurements for the variables are depicted in table 3.1.

**Table 3.1**

| **DEPENDENT VARIABLE** | **MEASUREMENTS** |
|---|---|
| TOBIN'S Q | The market value of equity plus liabilities divided by the book value of equity plus liabilities. |

**INDEPENDENT VARIABLES**

| | |
|---|---|
| Net Trade Cycle (NTC) | (accounts receivable/sales) x 365 + (inventories/sales) x 365 − (accounts payable/sales) x 365. |
| Current Ratio (CR) | Current assets to current liabilities |
| SIZE | natural logarithm of sales |
| LEVERAGE | total debt to total assets |
| GROWTH | (book value of intangibles assets/ total assets |
| ROA | earnings before interest and taxes over total assets. |

**FINANCIAL CONSTRAINTS VARIABLE**

| | |
|---|---|
| DIVIDEND PER SHARE | 1 for dividend paid, 0 for non-payment of dividend |

## 3.3 SPECIFICATION OF THE MODEL AND METHODOLOGY

The data for this study is collected from the DataStream. The sample comprises of non-financial listed firms in Malaysia and listed at the Bursa Malaysia stock exchange. The data was for the period of 2008 - 2012. At the first stage, 255 firms was collected but after sorting and filtering by eliminating companies with missing values and errors in the accounting data, it was left with 215 firms, making a total of 1075 firm-year observations. Table 3.2 below depicts the names and numbers of firms per industry used for this study.

**Table 3.2: LIST OF FIRMS PER INDUSTRY**

| | INDUSTRY | NUMBERS BEFORE SORTING | NUMBERS AFTER SORTING |
|---|---|---|---|
| 1 | Beverages | 9 | 7 |
| 2 | Food Producers | 74 | 66 |
| 3 | General Industrials | 33 | 30 |
| 4 | Household Goods | 38 | 30 |
| 5 | Leisure Goods | 6 | 5 |
| 6 | Media | 4 | 4 |
| 7 | Personal Goods | 36 | 26 |
| 8 | Support services | 26 | 22 |
| 9 | Travel and Leisure | 29 | 25 |
| | | **255** | **215** |

Descriptive statistics is used to test the frequency distribution, while Ordinary Least Square (OLS), Fixed-effect, Random-effect were used for testing the variables in the model to examine the significant of the independent variables.

## 3.4 HYPOTHESES

From the literature review of this study, it has been revealed that some previous studies on the relationship between firm performance and working capital management found a

negative relationship [(Shin & Soenen (1998); Deloof (2003); Mohamad and Mohd Saad (2010); Baños-Caballero, S., et al. (2013)], while some previous studies also found a positive relationship [Vural, Sökmen and Çetenak (2012); and Abuzayed (2011); Lyroudi & Lazaridis (2000)]. Ganesan (2007) findings revealed a negative relationship but not significant. Since there are mixed findings, this study aim to test whether the relationship between Tobin's Q is negative or positive. Thus hypothesis 1 is then written as:

H1: There is a relationship between Tobin's Q and Working Capital variables.

As discussed earlier in the introduction and problem statement section of this study that financial constraints may hinder firm financing decision. This may occur either through internal or external financing constraints. Moreover, as one of the study finds that financial constraints affect firms in Malaysia capital market (Ismail et al., 2010), it is crucial to identify this as a stumbling block and determinant of performance of firm in Malaysia. Thus, this study aims to examine the relationship that exists between financial constraints and firms' performance in Malaysia. This is stated in hypothesis 2 as:

H2: There is a relationship between financial constraints and corporate performance

In order to test the proposed hypotheses, a model was analyzed. The parameter $\lambda_t$ is a time dummy variable that aims to capture the influence of economic factors that may also affect corporate performance but which companies cannot control. $\eta_i$ is the unobservable heterogeneity or the firm's unobservable individual effects, so we can control for the particular characteristics of each firm. Finally, $\varepsilon_{i,t}$ is the random disturbance.

Therefore, the following model was estimated:

$$Q_{it} = \beta_o + \beta_1 NTC_{i,t} + \beta_2 CR_{i,t} + \beta_3 SIZE_{i,t} + \beta_4 LEV_{i,t} + \beta_5 GROWTH_{i,t} + \beta_6 ROA_{i,t} + \lambda_t + \eta_i + \varepsilon_i \quad (1)$$

Where:

NTC = Net Trade Cycle

CR = Current Ratio

SIZE = Firm Size

LEV = Leverage

GROWTH = Opportunity Growth

ROA = Return on Assets

$\lambda$ = Time dummy

$\eta$ = unobservable heterogeneity

$\varepsilon$ = random disturbance

To determine whether financial constraints of firms affect their performance, a dummy variable of dividends is induced into the variables used in Equation (1) to form Equation (2). Thus, the equation (2) is specified as follows:

$$Qit = \beta_o + \beta_1 NTC_{i,t} + \beta_2 CR_{i,t} + \beta_3 SIZE_{i,t} + \beta_4 LEV_{i,t} + \beta_5 GROWTH_{i,t} + \beta_6 ROA_{i,t} + \beta_6 DDIV_{i,t} + \lambda_t + \eta_i + \varepsilon_i \quad (2)$$

Where:

DDIV = Dummy Dividend

In order to expatiate more on the relationship that exist between firm performance, working capital management and financial constraints, regression analysis was applied.

## 3.5 SUMMARY

This chapter has been able to explain and describe vividly the variables used for this study, depict the theoretical framework and the measurements for the variables. This chapter also explains the specification of the model and the method to apply. It finally expatiates on the hypotheses of the study.

# CHAPTER FOUR

# ANALYSIS AND FINDINGS

## 4.0 INTRODUCTION

Previous chapter elaborate on the study on the variables used for this study, theoretical framework, development of hypotheses, and specification of model and methodology applied. However, this chapter will elucidate vividly the descriptive statistics, correlation matrix and analysis of the results of the data regressed for this study.

## 4.1 DATA AND SUMMARY STATISTICS

The analysis of this study started with the summary of the descriptive statistics. The descriptive statistics for firm performance, net trade cycle, current ratio and the control variables are reported in Table 4.1.

**Table 4.1: SUMMARY STATISTICS**

| Variable | Mean | Std.Dev. | Median | Minimum | Maximum | Variance |
|---|---|---|---|---|---|---|
| TOBIN'S Q | 1.11737 | 2.1396 | 0.7484 | -43.5157 | 7010.22 | 4.5777 |
| NTC | 100.5638 | 62.0934 | 90.7894 | -19465.74 | 1881.80 | 375887 |
| C. RATIO | 3.092 | 4.2100 | 1.8412 | 0.1046 | 46.3696 | 17.7244 |
| SIZE | 12.2280 | 1.6078 | 12.1301 | 0 | 17.6784 | 2.5851 |
| LEVERAGE | 0.1906 | 0.1587 | 0.1665 | 0 | 0.7722 | 0.02520 |
| GROWTH | 0.0444 | 0.1017 | 0.0033 | 0 | 0.6498 | 0.0103 |
| ROA | 0.0734 | 0.1977 | 0.0672 | -1.2126 | 5.5471 | 0.0391 |

Market to book ratio is on average of 1.12, while the median is 0.75. The mean NTC is 100.56 days (median is 90.79 days). Average of current assets to current liabilities is 3.09, while its median is 1.84. On leverage, 19.06% of total assets are financed with financial debt. The mean GROWTH ratio is 0.04 while its wide range is spread between 0 and 64.98% indicating a low variation of firms growing policies within this period of

study. Mean ROA is 7.07% (median is 6.72%), indicating 7.07% of total assets are generated from earnings.

**Table 4.2: CORRELATION MATRIX**

| | TOBIN's Q | NTC | CR | SIZE | LEVERAGE | GROWTH | ROA |
|---|---|---|---|---|---|---|---|
| TOBIN's Q | 1.0000 | | | | | | |
| NTC | 0.5942 | 1.0000 | | | | | |
| CR | -0.0116** | 0.0175** | 1.0000 | | | | |
| SIZE | 0.3077 | 0.0288** | -0.3019 | 1.0000 | | | |
| LEVERAGE | -0.0185** | 0.0513* | -0.4264 | 0.1982 | 1.0000 | | |
| GROWTH | 0.1578 | -0.0117** | -0.1120 | 0.1590 | 0.0426** | 1.0000 | |
| ROA | 0.3108 | 0.1743 | 0.1117 | 0.1597 | -0.1343 | 0.0141** | 1.0000 |

Note: **, * indicate significant at 5% and 10% respectively.

**Table 4.3: VARIANCE INFLATION FACTORS (VIF)**

| | |
|---|---|
| NTC | 1.040 |
| CR | 1.328 |
| SIZE | 1.469 |
| LEVERAGE | 1.465 |
| GROWTH | 1.059 |
| ROA | 1.121 |

Meanwhile, table 4.2 shows the correlations that exist among the variables. Correlation coefficient is applied to measure the degree of linear relationship that exists between two or more variables. A formal test was used to ascertain that multicollinearity is not present in this analysis by using variance inflation factor (VIF) that is depicted in Table 4.3 for each independent variable in the models. The largest VIF is 1.469 (SIZE), confirming that multicollinearity is not present in the sample, because it is not up to 5 (Studenmund, 1997).

Table 4.2 depict that current ratio (CR) is negatively correlated with TOBIN's Q (-1.16%), indicating that firm with lower current ratio achieve lower corporate performance. The correlation table also shows that current ratio (CR) is positively correlated with NTC (1.75%), implying that firm with high current ratio achieve better working capital management. LEVERAGE is negatively correlated with TOBIN's Q (-1.85%) at 5% significant level, indicating that firm with less debt financing achieve better firm performance. The positive correlation between SIZE and NTC (2.88%) shows that larger firms are less concern about efficient management of working capital. NTC and GROWTH has a negative significant correlation (-1.17%), indicating that efficient management of working capital affect firm's growth. LEVERAGE is positively correlated with NTC (5.13%) at 10% significant level, indicating that firm with high debt financing do not manage their working capital efficiently and effectively. LEVERAGE is also positively correlated with GROWTH (4.26%) indicating that firms with more debt financing create more opportunities for growth. Meanwhile, positive significant correlation between GROWTH and ROA (1.41%) indicates firm with high growth opportunities achieve high return on assets.

## 4.2 EFFECTS OF WORKING CAPITAL MANAGEMENT ON CORPORATE PERFORMANCE

The results of equation (1) are depicted in table 4.4. The NTC is positively significant with TOBIN's Q in the three regression analysis applied (Pooled OLS, Fixed-effect, and Random-effect) at 1% confidence level, indicating a positive significant relationship between corporate performance and working capital management. A firm with higher

NTC will achieve a higher corporate performance. This is consistent with predictions because it shows evidence that a statistically significant positive relationship exist between working capital and corporate performance. Current ratio is not significant with corporate performance under all the regression analysis applied. This indicates that maintaining higher or lower current ratio does not really affect the efficient and effective working capital management and corporate performance of firms under review. All the other independent variables are positively significant with firm performance at 1% except for leverage which is negatively significant at also 1%. Lower leverage will lead to lower interest expenses, which will lead to increase in firm performance. These findings are in line with the study of Lyroudi & Lazaridis (2000); Vural et al., (2012); Abuzayed (2011) etc.

**Table 4.4: Regression Analysis for Model 1**

| | **Pooled OLS** | **Fixed-Effect** | **Random-Effect** |
|---|---|---|---|
| **NTC** | 0.00197<br>0.000*** | 0.00196<br>0.000*** | 0.00197<br>0.000*** |
| **CR** | -0.03326<br>0.006*** | 0.01189<br>0.353 | 0.01253<br>0.328 |
| **SIZE** | 0.08525<br>0.000*** | 0.35492<br>0.000*** | 0.35801<br>0.000*** |
| **LEVERAGE** | -1.30058<br>0.000*** | -0.99124<br>0.003*** | -1.00713<br>0.002*** |
| **GROWTH** | 2.91262<br>0.000*** | 2.74732<br>0.000*** | 2.64012<br>0.000*** |
| **ROA** | 2.01522<br>0.000*** | 1.66189<br>0.000*** | 1.67725<br>0.000*** |

Note: ***, **,* significant at 0.01, 0.05 and 0.1 respectively.

## 4.3 FINANCIAL CONSTRAINTS, WORKING CAPITAL MANAGEMENT AND CORPORATE PERFORMANCE

Since the findings of the relationship between corporate performance and working capital management shows that working capital management has a negative significant relation with corporate performance, equation 2 ascertain whether financial constraints influence this relation. The result is depicted in table 4.5.

**Table 4.5: Regression Analysis for Model 2**

| | Pooled OLS | Fixed-Effect | Random-Effect |
|---|---|---|---|
| **NTC** | 0.00198<br>0.000*** | 0.00196<br>0.000*** | 0.00197<br>0.000*** |
| **CR** | -0.03121<br>0.010** | 0.01041<br>0.416 | 0.01129<br>0.378 |
| **SIZE** | 0.05396<br>0.000*** | 0.32259<br>0.000*** | 0.32933<br>0.000*** |
| **LEVERAGE** | -0.76588<br>0.038** | -0.71114<br>0.047** | -0.75967<br>0.033** |
| **GROWTH** | 3.17447<br>0.000*** | 2.91092<br>0.000*** | 2.78168<br>0.000*** |
| **ROA** | 1.87433<br>0.000*** | 1.60224<br>0.000*** | 1.62480<br>0.000*** |
| **DIVIDEND** | 0.43605<br>0.000*** | 0.23889<br>0.041** | 0.21352<br>0.067* |

Note: ***, **,* indicate significant at 1%, 5% and 10% respectively.

The findings (in table 4.5) show that the dummy dividend used as a proxy for financial constraints has a positive significant relationship with corporate performance with all the regression analysis applied in this study (Pooled OLS, Fixed-effect, and Random-effect).

This indicates that firms with less financial constraints have better performance than firms with high financial constraints.

This is expected since a higher working capital level needs financing, more financial constraints firms will have a lower working capital level than the less financial constraints firms. The financing constraints incurred by firms have effect on their optimal investment in working capital. The major cause of this is their huge financing costs and larger capital rationing, since the lower working capital investment result in lower need of external financing. Thus, this finding justify previous studies that find that working capital investment depends on external financing costs, internal financing resources, financial distress of the firms and capital market accessibility. The NTC is also positively significant under all the models (0.20%) at 1% significant level. This indicates that firms with less financial constraints manage their working capital efficiently and effectively. Meanwhile, current ratio (CR) is negatively significant under pooled OLS (3.12%), but it is insignificant under Fixed-effect and Random-effect. This shows that firms with less financial constraints were able to meet their short-term obligations, resulting to an efficient and effective management of working capital.

## 4.4 SUMMARY

The findings of this study have been expressly analyzed in this chapter. This consist of the summary statistics of data for this study, the correlation matrix showing the correlation between the independent variables, the Variance Inflation factors that indicates the level of multicollinearity of the variables, and the regression analyses of the data using Pooled OLS, Fixed-effects, and Random-effects .

# CHAPTER FIVE

# CONCLUSION AND RECOMMENDATION

## 5.0 INTRODUCTION

Previous chapter discussed the findings of this study through the results of the descriptive statistics, correlation matrix and the regression analysis. However, this chapter focused on the conclusions, implications and further research recommended by this study.

## 5.1 CONCLUSION

Theoretical and empirical evidence have been provided by this study to justify the relationship that exist between corporate performance and managing of working capital by putting financial constraints into consideration. The objectives of this study are to examine whether working capital decision affect firm performance, to test whether working capital decision and financial constraints influence firm performance, and to investigate if financial constraint is related to working capital. The data for this study is collected from the DataStream. The sample comprises of non-financial quoted firms in Malaysia and listed at the Bursa Malaysia stock exchange. The data for 215 firms was analyzed from the period of 2008 - 2012. A panel data model is used and the methods applied for the regression analysis were Pooled OLS, Fixed-effects, and Random-effect, which allow for the control for unobservable heterogeneity and for potential endogeneity problems. Multitude of previous studies has shown that corporate performance is influenced by efficient and effective working capital management. Most of these studies found a negative significant relationship between firms' performance and working capital management, while few studies came out with a positive significant relationship between

them. However, this study is in line with previous studies that found positive relationship between corporate performance and working capital management. Moreover, few studies have empirically evaluated the effect of financial constraints on this relationship. Thus, this study contributes to previous studies by putting financial constraints into consideration, with the findings that financial constraints slightly affect the relationship that exist between corporate performance and working capital management of non-financial firms listed in Bursa Malaysia stock exchange. This study recommends that for a firm to achieve a better performance cum maximizing shareholder's wealth, it must achieve a better working capital with a longer net trade cycle (NTC) as well as meeting its short-term obligations.

## 5.2 IMPLICATIONS

This study implies that maintaining an efficient and effective working capital should be a priority for managers because of its effect on overall firm performance. In addition, working capital should be of concern to managers due to the costs that could be incurred if optimal working capital level is not achieved by the firm. Moreover, negative impact on corporate performance that arises through early payments lost discounts, lost sales, or through incurring additional financing expenses.

## 5.3 FUTURE RESEARCH

This study is open for further research. Further study should focus on optimal level of working capital and control of financial constraints, and also the effect of financial constraints on the optimal level of working capital should also be further researched.

## 5.4 SUMMARY

This chapter entails the conclusion of the study, the implication of the study and suggestion on future research on this study.

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# APPENDICES

## APPENDIX 1

```
Fixed-effects (within) regression               Number of obs      =      1075
Group variable (i): year                        Number of groups   =         5

R-sq:  within  = 0.4863                         Obs per group: min =       215
       between = 0.8979                                        avg =     215.0
       overall = 0.4872                                        max =       215

                                                F(6,1064)          =    167.87
corr(u_i, Xb)  = 0.0477                         Prob > F           =    0.0000

------------------------------------------------------------------------------
      tobinq |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         ntc |   .0019583   .0000779    25.14   0.000     .0018055    .0021112
    curratio |   .0118865   .0128004     0.93   0.353    -.0132304    .0370034
        size |   .3549183   .0316381    11.22   0.000     .2928382    .4169984
    leverage |  -.9912401   .3312875    -2.99   0.003    -1.641291   -.3411891
      growth |   2.747318   .4688855     5.86   0.000     1.827273    3.667363
         roa |   1.661897   .2489542     6.68   0.000       1.1734    2.150394
       _cons |  -3.511028   .3970746    -8.84   0.000    -4.290167    -2.73189
-------------+----------------------------------------------------------------
     sigma_u |  .15864171
     sigma_e |  1.5327712
         rho |   .0105987   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(4, 1064) =     2.28                 Prob > F = 0.0590
```

```
. xtreg tobinq ntc curratio size leverage growth roa, re

Random-effects GLS regression                   Number of obs      =      1075
Group variable (i): year                        Number of groups   =         5

R-sq:  within  = 0.4863                         Obs per group: min =       215
       between = 0.8985                                        avg =     215.0
       overall = 0.4872                                        max =       215

Random effects u_i ~ Gaussian                   Wald chi2(6)       =   1014.68
corr(u_i, X)       = 0 (assumed)                Prob > chi2        =    0.0000

------------------------------------------------------------------------------
      tobinq |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         ntc |   .0019694   .0000779    25.27   0.000     .0018166    .0021222
    curratio |   .0125277   .0128166     0.98   0.328    -.0125923    .0376477
        size |   .3580076   .0316831    11.30   0.000     .2959099    .4201052
    leverage |  -1.007134   .3309779    -3.04   0.002    -1.655839   -.3584293
      growth |   2.640116   .4683267     5.64   0.000     1.722212    3.558019
         roa |   1.677254   .2494528     6.72   0.000     1.188335    2.166172
       _cons |  -3.545241   .3977959    -8.91   0.000    -4.324907   -2.765576
-------------+----------------------------------------------------------------
     sigma_u |          0
     sigma_e |  1.5327712
         rho |          0   (fraction of variance due to u_i)
------------------------------------------------------------------------------
```

Breusch and Pagan Lagrangian multiplier test for random effects:

tobinq[year,t] = Xb + u[year] + e[year,t]

Estimated results:

| Var | sd = sqrt(Var)
---|---|---
tobinq | 4.577714 | 2.139559
e | 2.349388 | 1.532771
u | 0 | 0

Test: Var(u) = 0

chi2(1) = 1.63

Prob > chi2 = 0.2011

Fixed-effects (within) regression — Number of obs = 1075

Group variable (i): year — Number of groups = 5

R-sq: within = 0.4883 — Obs per group: min = 215

between = 0.8668 — avg = 215.0

overall = 0.4887 — max = 215

F(7,1063) = 144.92

corr(u_i, Xb) = 0.0431 — Prob > F = 0.0000

```
------------------------------------------------------------------------------
      tobinq |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         ntc |   .0019632   .0000778    25.23   0.000     .0018105    .0021159
    curratio |   .0104087   .0128015     0.81   0.416    -.0147105    .0355279
        size |   .3225921   .0353125     9.14   0.000      .253302    .3918822
    leverage |  -.7111349   .3579357    -1.99   0.047    -1.413476   -.0087941
      growth |   2.910916   .4749447     6.13   0.000      1.97898    3.842851
         roa |   1.602243   .2502808     6.40   0.000     1.111142    2.093343
    dividend |   .2388932   .1166135     2.05   0.041     .0100744     .467712
       _cons |  -3.314395   .4079326    -8.12   0.000    -4.114839    -2.51395
-------------+----------------------------------------------------------------
     sigma_u |  .16596528
     sigma_e |  1.5304739
         rho |  .01162266   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(4, 1063) =     2.49             Prob > F = 0.0418

. xtreg tobinq ntc curratio size leverage growth roa dividend,re

Random-effects GLS regression                   Number of obs      =      1075
Group variable (i): year                        Number of groups   =         5

R-sq:  within  = 0.4883                         Obs per group: min =       215
       between = 0.8732                                        avg =     215.0
       overall = 0.4888                                        max =       215

Random effects u_i ~ Gaussian                   Wald chi2(7)       =   1020.30
corr(u_i, X)       = 0 (assumed)                Prob > chi2        =    0.0000
```

| tobinq | Coef. | Std. Err. | z | P>\|z\| | [95% Conf. | Interval] |
|---|---|---|---|---|---|---|
| ntc | .0019741 | .0000779 | 25.34 | 0.000 | .0018214 | .0021267 |
| curratio | .0112926 | .0128201 | 0.88 | 0.378 | -.0138342 | .0364195 |
| size | .3293297 | .035299 | 9.33 | 0.000 | .2601449 | .3985145 |
| leverage | -.7596693 | .3570775 | -2.13 | 0.033 | -1.459528 | -.0598102 |
| growth | 2.781676 | .4741318 | 5.87 | 0.000 | 1.852395 | 3.710958 |
| roa | 1.624801 | .2508125 | 6.48 | 0.000 | 1.133217 | 2.116384 |
| dividend | .2135245 | .1164045 | 1.83 | 0.067 | -.0146242 | .4416731 |
| _cons | -3.371724 | .4084605 | -8.25 | 0.000 | -4.172292 | -2.571156 |
| sigma_u | 0 | | | | | |
| sigma_e | 1.5304739 | | | | | |
| rho | 0 | (fraction of variance due to u_i) | | | | |

**APPEENDIX 2**: POOLED OLS RESULTS

Model 1: Pooled OLS, using 1075 observations
Included 5 cross-sectional units
Time-series length = 215
Dependent variable: TOBINQ

| | *Coefficient* | *Std. Error* | *t-ratio* | *p-value* | |
|---|---|---|---|---|---|
| NTC | 0.00196777 | 8.07461e-05 | 24.3699 | <0.00001 | *** |
| CUR_RATIO | -0.0332641 | 0.0121646 | -2.7345 | 0.00635 | *** |
| SIZE | 0.0852536 | 0.00849169 | 10.0397 | <0.00001 | *** |
| LEVERAGE | -1.30058 | 0.341203 | -3.8117 | 0.00015 | *** |
| GROWTH | 2.91262 | 0.484167 | 6.0157 | <0.00001 | *** |
| ROA | 2.01522 | 0.255438 | 7.8893 | <0.00001 | *** |

| | | | |
|---|---|---|---|
| Mean dependent var | 1.117373 | S.D. dependent var | 2.139559 |
| Sum squared resid | 2708.662 | S.E. of regression | 1.591800 |
| R-squared | 0.567212 | Adjusted R-squared | 0.565187 |
| F(6, 1069) | 233.5048 | P-value(F) | 1.8e-190 |
| Log-likelihood | -2022.081 | Akaike criterion | 4056.162 |
| Schwarz criterion | 4086.042 | Hannan-Quinn | 4067.479 |
| rho | -0.056196 | Durbin-Watson | 2.104925 |

Model 2: Pooled OLS, using 1075 observations
Included 5 cross-sectional units
Time-series length = 215
Dependent variable: TOBINQ

| | *Coefficient* | *Std. Error* | *t-ratio* | *p-value* | |
|---|---|---|---|---|---|
| NTC | 0.00197746 | 8.03033e-05 | 24.6249 | <0.00001 | *** |
| CUR_RATIO | -0.0312093 | 0.0121041 | -2.5784 | 0.01006 | ** |
| SIZE | 0.0539506 | 0.0118947 | 4.5357 | <0.00001 | *** |
| LEVERAGE | -0.765883 | 0.36813 | -2.0805 | 0.03772 | ** |
| GROWTH | 3.17447 | 0.48634 | 6.5273 | <0.00001 | *** |
| ROA | 1.87433 | 0.256691 | 7.3019 | <0.00001 | *** |
| DIVIDEND | 0.436053 | 0.116745 | 3.7351 | 0.00020 | *** |

| | | | |
|---|---|---|---|
| Mean dependent var | 1.117373 | S.D. dependent var | 2.139559 |
| Sum squared resid | 2673.736 | S.E. of regression | 1.582245 |
| R-squared | 0.572792 | Adjusted R-squared | 0.570392 |
| F(7, 1068) | 204.5647 | P-value(F) | 2.9e-192 |
| Log-likelihood | -2015.105 | Akaike criterion | 4044.211 |
| Schwarz criterion | 4079.071 | Hannan-Quinn | 4057.413 |
| rho | -0.061023 | Durbin-Watson | 2.113850 |

**APPENDIX 3:** DATA FOR VARIABLES

| YEAR | ID | TOBIN Q | NTC | CR | SIZE | LEVERAGE | GROWTH | ROA | DIV |
|---|---|---|---|---|---|---|---|---|---|
| 2008 | 1 | 0.2027 | 186.9507 | 2.15 | 12.2635 | 0.38049 | 0.0957 | -0.0124 | 0 |
| 2009 | 1 | 0.1482 | 131.368 | 2.07 | 12.3311 | 0.3726 | 0.0965 | 0.0222 | 0 |
| 2010 | 1 | 0.1560 | 136.425 | 2.14 | 12.3098 | 0.1918 | 0.1098 | 0.0041 | 0 |
| 2011 | 1 | 0.2812 | 148 | 4.49 | 12.3117 | 0.14804 | 0.1191 | 0.0158 | 1 |
| 2012 | 1 | 0.2051 | 163.3684 | 3.92 | 12.345 | 0.10774 | 0.173 | 0.0261 | 1 |
| 2008 | 2 | 1.9206 | 113.5524 | 1.09 | 14.7843 | 0.77218 | 0.001 | -0.066 | 0 |
| 2009 | 2 | 1.0325 | 59.8584 | 1.3 | 14.9575 | 0.71456 | 0.0008 | 0.0937 | 0 |
| 2010 | 2 | 1.0077 | 41.8674 | 1.56 | 15.1887 | 0.62749 | 0.0007 | 0.1497 | 1 |
| 2011 | 2 | 1.7860 | 40.48937 | 1.73 | 15.3185 | 0.58113 | 0.0005 | 0.0858 | 1 |
| 2012 | 2 | 1.6277 | 68.23212 | 1.3 | 15.4141 | 0.51328 | 0.0004 | 0.1456 | 1 |
| 2008 | 3 | 0.3351 | 186.337 | 1.23 | 12.6444 | 0.26819 | 0.0824 | 0.0422 | 0 |
| 2009 | 3 | 0.2562 | 113.9458 | 1.09 | 12.7142 | 0.26167 | 0.0835 | 0.0423 | 0 |
| 2010 | 3 | 0.4033 | 107.2756 | 1.62 | 12.6714 | 0.19882 | 0.0749 | 0.1417 | 1 |
| 2011 | 3 | 0.7015 | 107.5265 | 2.04 | 12.7771 | 0.14584 | 0.0635 | 0.1564 | 1 |
| 2012 | 3 | 0.4845 | 236.0543 | 3.05 | 12.711 | 0.14553 | 0.1451 | 0.0935 | 1 |
| 2008 | 4 | 1.2142 | 356.4218 | 2.43 | 14.2316 | 0.21544 | 0.5139 | 0.1108 | 1 |
| 2009 | 4 | 0.7125 | 146.5112 | 1.49 | 15.2389 | 0.23828 | 0.4922 | 0.042 | 1 |
| 2010 | 4 | 0.9804 | 136.5372 | 1.62 | 15.2139 | 0.25635 | 0.465 | 0.0571 | 1 |
| 2011 | 4 | 1.1009 | 73.57545 | 0.96 | 15.2158 | 0.22915 | 0.4644 | 0.0558 | 1 |
| 2012 | 4 | 0.8190 | 76.31124 | 1.81 | 15.2496 | 0.21854 | 0.4616 | 0.055 | 1 |
| 2008 | 5 | 20.7968 | 2.770408 | 0.56 | 15.0027 | 0.35179 | 0.6043 | 0.5128 | 1 |
| 2009 | 5 | 13.0210 | 1.774786 | 0.67 | 15.1227 | 0.23681 | 0.5575 | 0.5422 | 1 |
| 2010 | 5 | 13.2949 | 1.085379 | 0.91 | 15.0372 | 0.36845 | 0.5272 | 0.4685 | 1 |
| 2011 | 5 | 12.6125 | 4.035372 | 1.32 | 15.049 | 0.38261 | 0.4471 | 0.3744 | 1 |
| 2012 | 5 | 12.4288 | 2.176491 | 1.38 | 15.0986 | 0.3893 | 0.4549 | 0.4294 | 1 |
| 2008 | 6 | 0.6228 | 859.2496 | 4.2 | 9.64336 | 0.24173 | 0.0072 | -0.1096 | 0 |
| 2009 | 6 | 0.2497 | 486.6046 | 1.7 | 9.88328 | 0.24439 | 0.0189 | -0.0906 | 0 |
| 2010 | 6 | 0.3460 | 419.42 | 1.51 | 10.0166 | 0.23807 | 0.0155 | -0.0115 | 0 |
| 2011 | 6 | 0.5524 | 153.0136 | 1.6 | 9.95347 | 0.07092 | 0.0086 | 0.4134 | 0 |
| 2012 | 6 | 0.4772 | 142.3197 | 1.27 | 10.1467 | 0.06432 | 0.0084 | -0.0264 | 0 |
| 2008 | 7 | 0.4046 | 284.3872 | 0.29 | 11.1432 | 0.21869 | 0.0061 | 0.0455 | 0 |
| 2009 | 7 | 0.2035 | 386.8883 | 0.3 | 10.9226 | 0.25385 | 0.0072 | 0.0464 | 0 |
| 2010 | 7 | 0.1931 | 483.1278 | 0.41 | 10.3651 | 0.1742 | 0 | 0.0338 | 0 |
| 2011 | 7 | 0.2002 | 201.2098 | 0.55 | 11.2542 | 0.03547 | 0 | 0.0672 | 0 |
| 2012 | 7 | 0.3283 | 529.1595 | 0.6 | 10.4938 | 0.03915 | 0 | 0.0137 | 0 |
| 2008 | 8 | 1.9044 | 27.96625 | 5.05 | 16.0219 | 0.19272 | 0.1298 | 0.0635 | 1 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 2009 | 8 | 1.1360 | 31.24843 | 4.82 | 16.0008 | 0.31129 | 0.1437 | 0.0638 | 1 |
| 2010 | 8 | 1.5773 | 44.97792 | 3.26 | 16.5365 | 0.27502 | 0.1148 | 0.1004 | 1 |
| 2011 | 8 | 2.3466 | 46.17971 | 2.6 | 16.7889 | 0.26139 | 0.1364 | 0.13 | 1 |
| 2012 | 8 | 1.8530 | 59.89608 | 4.54 | 16.6638 | 0.3113 | 0.0934 | 0.0819 | 1 |
| 2008 | 9 | 2.4004 | 11.68938 | 6.19 | 15.402 | 0 | 0 | 0.1197 | 1 |
| 2009 | 9 | 1.3565 | 10.04688 | 6.63 | 15.4233 | 0 | 0.0112 | 0.1556 | 1 |
| 2010 | 9 | 1.4600 | 11.69648 | 2.4 | 15.4894 | 0.0709 | 0.2127 | 0.118 | 1 |
| 2011 | 9 | 1.8404 | 4.03087 | 1.42 | 15.9548 | 0.10904 | 0.2625 | 0.117 | 1 |
| 2012 | 9 | 1.7168 | -1.03587 | 2.41 | 15.8815 | 0.06593 | 0.2436 | 0.1101 | 1 |
| 2008 | 10 | 0.6198 | 20.97018 | 2.11 | 10.8632 | 0.03484 | 0 | 0.0618 | 1 |
| 2009 | 10 | 0.5453 | 21.87208 | 2.99 | 10.8026 | 0.02705 | 0.0134 | 0.0465 | 1 |
| 2010 | 10 | 0.5381 | 21.93585 | 3.18 | 10.5841 | 0.02995 | 0 | 0.0211 | 1 |
| 2011 | 10 | 0.4987 | 34.09135 | 9.44 | 10.5722 | 0.00021 | 0 | 0.0341 | 1 |
| 2012 | 10 | 0.5076 | 0 | 10.3 | 10.4947 | 0.00087 | 0 | 0.0507 | 1 |
| 2008 | 11 | 0.4320 | 84.9712 | 0.82 | 10.8094 | 0.20141 | 0 | -0.0718 | 0 |
| 2009 | 11 | 0.1984 | 150.152 | 1.4 | 10.9365 | 0.12524 | 0 | 0.063 | 0 |
| 2010 | 11 | 0.7562 | 76.24576 | 1.02 | 10.7803 | 0.11781 | 0 | -0.0844 | 0 |
| 2011 | 11 | 0.5819 | 137.6573 | 1.38 | 10.6966 | 0.09708 | 0 | 0.0082 | 0 |
| 2012 | 11 | 0.6346 | 103.9169 | 1.02 | 10.4966 | 0.1099 | 0 | -0.1035 | 0 |
| 2008 | 12 | 0.7114 | 83.6469 | 1.46 | 10.8171 | 0.23539 | 0.0233 | 0.0202 | 0 |
| 2009 | 12 | 0.4720 | 116.3738 | 1.46 | 10.5251 | 0.20138 | 0.0214 | 0.005 | 0 |
| 2010 | 12 | 0.6816 | 302.2916 | 0.93 | 10.1285 | 0.52402 | 0.0804 | 0.0409 | 0 |
| 2011 | 12 | 1.8543 | 58.48416 | 0.69 | 11.2338 | 0.4353 | 0.0852 | 0.1464 | 1 |
| 2012 | 12 | 1.3325 | 21.53907 | 0.83 | 11.2772 | 0.3372 | 0.101 | 0.1762 | 1 |
| 2008 | 13 | 0.7386 | 61.37703 | 0.61 | 12.5846 | 0.54507 | 0.2008 | -0.0538 | 0 |
| 2009 | 13 | 0.6043 | -5.7841 | 0.36 | 12.5502 | 0.53653 | 0.2243 | -0.0003 | 0 |
| 2010 | 13 | 0.5573 | 5.254777 | 0.26 | 12.4856 | 0.38656 | 0.2262 | -0.0364 | 0 |
| 2011 | 13 | 0.4164 | 4.885863 | 0.28 | 12.4442 | 0.3393 | 0.2406 | -0.0491 | 0 |
| 2012 | 13 | 0.6007 | 31.20431 | 0.43 | 12.392 | 0.27458 | 0.2497 | -0.0317 | 0 |
| 2008 | 14 | 0.6584 | 238.5412 | 9.15 | 10.7939 | 0.044 | 0 | -0.0018 | 0 |
| 2009 | 14 | 0.2570 | 241.3513 | 10.7 | 10.7531 | 0.04041 | 0 | 0.0003 | 1 |
| 2010 | 14 | 0.3511 | 155.9728 | 10.5 | 10.6259 | 0.03765 | 0 | -0.001 | 0 |
| 2011 | 14 | 0.4421 | 162.7561 | 8.66 | 10.6346 | 0.03373 | 0.0003 | -0.0038 | 0 |
| 2012 | 14 | 0.2706 | 175.5492 | 2.44 | 10.8122 | 0.02864 | 0.0003 | -0.0011 | 0 |
| 2008 | 15 | 1.5133 | 20.64771 | 1.38 | 16.5259 | 0.14668 | 0.0106 | 0.0301 | 0 |
| 2009 | 15 | 7.1130 | 4.704429 | 0.86 | 16.2412 | 0.2731 | 0.015 | 0.0628 | 0 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 2010 | 15 | 2.1499 | -2.12157 | 0.74 | 16.379 | 0.29841 | 0.0111 | 0.0323 | 0 |
| 2011 | 15 | 5.8139 | -11.0203 | 0.39 | 16.4295 | 0.45365 | 0.0121 | -0.1896 | 0 |
| 2012 | 15 | 2.0390 | -6.98341 | 0.54 | 16.4023 | 0.55225 | 0.0089 | -0.0109 | 0 |
| 2008 | 16 | 0.6526 | 65.98538 | 1.38 | 15.1991 | 0.22146 | 0.0485 | 0.1023 | 1 |
| 2009 | 16 | 0.4915 | 59.68885 | 1.31 | 15.5744 | 0.21138 | 0.1669 | 0.0737 | 1 |
| 2010 | 16 | 0.6618 | 61.9687 | 0.95 | 15.5182 | 0.20838 | 0.1132 | 0.0927 | 1 |
| 2011 | 16 | 0.9762 | 66.15381 | 1.71 | 15.7674 | 0.22751 | 0.0953 | 0.1258 | 1 |
| 2012 | 16 | 1.3947 | 107.2356 | 1.22 | 13.7177 | 0.12218 | 0.003 | -0.0824 | 1 |
| 2008 | 17 | 0.5875 | 204.0703 | 1.76 | 13.6719 | 0.31194 | 0.0076 | -0.0194 | 0 |
| 2009 | 17 | 0.2035 | 234.4685 | 0.43 | 13.4178 | 0.36279 | 0.0058 | -0.0138 | 0 |
| 2010 | 17 | 0.4054 | 191.6905 | 2.51 | 13.5854 | 0.28605 | 0.0033 | -0.0142 | 0 |
| 2011 | 17 | 0.4194 | 327.2551 | 1 | 13.3652 | 0.2422 | 0.002 | -0.0371 | 0 |
| 2012 | 17 | 0.4171 | 394.6973 | 1.65 | 13.1999 | 0.30883 | 0.0023 | -0.0399 | 0 |
| 2008 | 18 | 0.9524 | 45.36084 | 2.52 | 14.9589 | 0.48065 | 0.5246 | 0.0803 | 0 |
| 2009 | 18 | 0.6622 | 41.73075 | 2.43 | 15.0165 | 0.43356 | 0.5075 | 0.1191 | 0 |
| 2010 | 18 | 1.0106 | 43.2102 | 3.13 | 15.101 | 0.34836 | 0.4669 | 0.1077 | 0 |
| 2011 | 18 | 0.9941 | 30.77148 | 2.66 | 15.0847 | 0.34309 | 0.394 | 0.1113 | 0 |
| 2012 | 18 | 1.1483 | 16.30407 | 2.43 | 15.0434 | 0.22353 | 0.4885 | 0.0817 | 0 |
| 2008 | 19 | 1.1933 | 333.5187 | 3.51 | 12.894 | 0.66339 | 0 | 0.084 | 0 |
| 2009 | 19 | 0.5112 | 323.2769 | 2.1 | 12.7005 | 0.56206 | 0 | 0.0122 | 0 |
| 2010 | 19 | 0.2295 | 443.8243 | 1.86 | 12.4371 | 0.20362 | 0 | 0.0114 | 0 |
| 2011 | 19 | 0.4173 | 493.7673 | 1.67 | 12.3962 | 0.18224 | 0 | -0.0221 | 0 |
| 2012 | 19 | 0.4299 | 424.1508 | 1.39 | 12.1595 | 0.25871 | 0 | -0.0006 | 0 |
| 2008 | 20 | 1.2251 | 963.9638 | 1.52 | 10.0022 | 0.39816 | 0 | 0.0025 | 0 |
| 2009 | 20 | 0.6226 | 1161.433 | 6.13 | 9.81203 | 0.22906 | 0.0417 | 0.0137 | 0 |
| 2010 | 20 | 0.6458 | 1208.622 | 3.78 | 9.77076 | 0.19943 | 0.0032 | 0.0493 | 0 |
| 2011 | 20 | 0.5927 | 1881.796 | 5.01 | 9.29881 | 0.16858 | 0.0033 | 0.0305 | 0 |
| 2012 | 20 | 0.9211 | 1808.714 | 5.9 | 9.31614 | 0.21338 | 0.0047 | 0.0216 | 0 |
| 2008 | 21 | 1.6248 | 145.5787 | 3.46 | 12.9325 | 0.34808 | 0.0146 | 0.068 | 1 |
| 2009 | 21 | 0.9992 | 133.4626 | 2.16 | 13.2242 | 0.3518 | 0.0688 | 0.0468 | 1 |
| 2010 | 21 | 1.0597 | 175.145 | 1.6 | 13.033 | 0.3794 | 0.0693 | 0.0279 | 1 |
| 2011 | 21 | 1.8057 | 108.0296 | 1.56 | 13.1311 | 0.29734 | 0.0369 | 0.03 | 0 |
| 2012 | 21 | 1.0729 | 227.6095 | 1.36 | 12.3886 | 0.30566 | 0.0599 | 0.0238 | 0 |
| 2008 | 22 | 2.1982 | 129.0299 | 0.81 | 12.3363 | 0.39997 | 0.0049 | 0.0151 | 0 |
| 2009 | 22 | 0.7780 | 32.70808 | 0.54 | 12.0447 | 0.37177 | 0.0064 | -0.1266 | 0 |
| 2010 | 22 | 1.4069 | 119.5787 | 0.62 | 11.9742 | 0.42454 | 0.0034 | -0.1593 | 0 |
| 2011 | 22 | 1.9723 | 52.46927 | 1.1 | 11.6802 | 0.43045 | 0.0033 | - | 0 |

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|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 0.0919 | |
| 2012 | 22 | 1.6429 | 65.8273 | 1.25 | 12.141 | 0.39179 | 0.0039 | 0.072 | 0 |
| 2008 | 23 | 1.4103 | 21.41694 | 0.44 | 12.9371 | 0.16914 | 0 | 0.0739 | 1 |
| 2009 | 23 | 1.1642 | 24.28525 | 0.34 | 12.8141 | 0.16593 | 0.0169 | 0.0502 | 1 |
| 2010 | 23 | 1.0669 | 11.54675 | 0.38 | 12.9528 | 0.09755 | 0 | 0.0881 | 1 |
| 2011 | 23 | 1.4279 | 3.792431 | 0.4 | 12.9709 | 0.06389 | 0 | 0.0769 | 1 |
| 2012 | 23 | 1.5038 | 6.271285 | 0.46 | 13.0596 | 0.05315 | 0 | 0.0913 | 1 |
| 2008 | 24 | 0.7691 | 679.4674 | 2.41 | 13.2117 | 0.04447 | ###### | 0.0961 | 1 |
| 2009 | 24 | 0.5496 | 433.6779 | 3.14 | 13.1908 | 0.04393 | ###### | 0.0528 | 1 |
| 2010 | 24 | 0.7706 | 268.9278 | 1.84 | 12.9883 | 0.16201 | 0.061 | 0.0375 | 1 |
| 2011 | 24 | 0.8353 | 138.084 | 1.85 | 13.3356 | 0.17145 | 0.0613 | 0.0363 | 1 |
| 2012 | 24 | 0.6269 | 21.11713 | 1.5 | 13.4533 | 0.19256 | 0.0624 | 0.0369 | 1 |
| 2008 | 25 | 0.6361 | 90.08959 | 1.5 | 12.6379 | 0.17895 | 0.0017 | 0.0473 | 1 |
| 2009 | 25 | 0.5720 | 108.618 | 1.86 | 12.6174 | 0.14835 | 0.0162 | 0.0387 | 1 |
| 2010 | 25 | 0.7245 | 123.1404 | 1.6 | 12.8044 | 0.29073 | 0.0316 | 0.0498 | 1 |
| 2011 | 25 | 0.6569 | 137.4999 | 1.47 | 13.0614 | 0.36874 | 0.0259 | 0.0538 | 1 |
| 2012 | 25 | 0.5853 | 134.0635 | 1.36 | 13.1547 | 0.34298 | 0.0244 | 0.0796 | 1 |
| 2008 | 26 | 0.6320 | 282.2787 | 1.59 | 9.78594 | 0.29364 | 0 | -0.047 | 0 |
| 2009 | 26 | 0.3513 | 397.4619 | 2.53 | 9.02918 | 0.31864 | 0 | 0.0927 | 0 |
| 2010 | 26 | 0.4025 | 499.9826 | 1.91 | 8.60758 | 0.01899 | 0 | -0.0838 | 0 |
| 2011 | 26 | 0.5041 | 198.6959 | 1.63 | 10.6789 | 0.26889 | 0 | 0.1502 | 0 |
| 2012 | 26 | 0.5567 | 173.1721 | 1.79 | 10.8073 | 0.25385 | 0 | 0.028 | 0 |
| 2008 | 27 | 2.0715 | 107.7884 | 2.07 | 12.6122 | 0.25458 | 0.0185 | 0.16 | 1 |
| 2009 | 27 | 1.0903 | 98.04628 | 3.23 | 12.66 | 0.16003 | 0.02 | 0.1376 | 1 |
| 2010 | 27 | 1.0286 | 90.89752 | 4.5 | 12.7941 | 0.11038 | 0.0183 | 0.1767 | 1 |
| 2011 | 27 | 1.5719 | 101.4376 | 2.74 | 13.042 | 0.13755 | 0.1874 | 0.1586 | 1 |
| 2012 | 27 | 1.8702 | 85.43329 | 2.71 | 13.2705 | 0.12621 | 0.1634 | 0.1669 | 1 |
| 2008 | 28 | 2.1673 | 65.65689 | 3.85 | 12.1111 | 0.00122 | 0.0008 | 0.1672 | 1 |
| 2009 | 28 | 1.4671 | 68.49967 | 5.13 | 11.9736 | 0.00217 | 0.0203 | 0.0807 | 1 |
| 2010 | 28 | 1.6683 | 70.7542 | 6.19 | 11.8089 | 0.00089 | 0.0224 | 0.033 | 1 |
| 2011 | 28 | 1.2420 | 85.38639 | 5.5 | 11.7486 | 0.00079 | 0.0265 | 0.0289 | 1 |
| 2012 | 28 | 0.9774 | 88.33568 | 5.29 | 11.6598 | 0.00057 | 0.027 | 0.0146 | 1 |
| 2008 | 29 | 0.9624 | 208.5978 | 3.24 | 12.2511 | 0.14881 | 0.0378 | 0.1042 | 1 |
| 2009 | 29 | 0.6944 | 249.721 | 4.04 | 12.1515 | 0.15928 | 0.0452 | 0.1106 | 1 |
| 2010 | 29 | 0.8838 | 271.7585 | 4.63 | 12.1295 | 0.12109 | 0.0364 | 0.104 | 1 |
| 2011 | 29 | 0.8492 | 278.0126 | 3.88 | 12.3 | 0.12738 | 0.0298 | 0.1358 | 0 |
| 2012 | 29 | 0.6377 | 260.3741 | 5.91 | 12.4324 | 0.13871 | 0 | 0.1202 | 1 |
| 2008 | 30 | 1.9715 | 231.3616 | 3.78 | 11.1919 | 0.0096 | 0 | 0.1279 | 1 |
| 2009 | 30 | 1.9779 | 174.8055 | 4.16 | 11.2328 | 0.01217 | 0.0451 | 0.0977 | 1 |
| 2010 | 30 | 1.7956 | 150.6484 | 3.01 | 11.4866 | 0.00101 | 0 | 0.1506 | 1 |
| 2011 | 30 | 2.1115 | 143.6293 | 3.82 | 11.4677 | 0.00057 | 0 | 0.1661 | 1 |
| 2012 | 30 | 2.7061 | 164.8735 | 5.36 | 11.3421 | 2.15E-05 | 0 | 0.1722 | 1 |

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|---|---|---|---|---|---|---|---|---|---|
| 2008 | 31 | 0.6928 | 139.0368 | 2.68 | 12.0267 | 0.00068 | 0.0236 | 0.1315 | 1 |
| 2009 | 31 | 0.5828 | 141.1939 | 3.55 | 12.119 | 0.00054 | 0.0236 | 0.0927 | 1 |
| 2010 | 31 | 0.6202 | 138.0593 | 3.5 | 12.0477 | 0.00037 | 0.0499 | 0.029 | 1 |
| 2011 | 31 | 0.9546 | 126.6932 | 3.22 | 11.8572 | 0.04721 | 0.0637 | -0.3274 | 0 |
| 2012 | 31 | 0.6195 | 91.07073 | 6.29 | 11.7931 | 0 | 0.0279 | 0.0371 | 0 |
| 2008 | 32 | 0.9426 | 44.48696 | 7.33 | 9.08478 | 0 | 0 | 0.0027 | 0 |
| 2009 | 32 | 0.8119 | 4.410128 | 9.41 | 8.90463 | 0 | 0 | 0.0307 | 0 |
| 2010 | 32 | 0.9371 | 71.09385 | 1.19 | 9.86993 | 0.02518 | 0.0111 | 0.0325 | 0 |
| 2011 | 32 | 0.9500 | 57.31396 | 2.37 | 10.4774 | 0.02922 | 0.012 | 0.0659 | 0 |
| 2012 | 32 | 0.8775 | 74.24854 | 3.18 | 10.5142 | 0.03076 | 0.0116 | 0.0537 | 0 |
| 2008 | 33 | 0.5837 | 142.0567 | 2.92 | 11.4464 | 0.20012 | 0.0181 | 0.0866 | 1 |
| 2009 | 33 | 0.3919 | 141.9951 | 3.07 | 11.3002 | 0.16566 | 0.0561 | 0.048 | 1 |
| 2010 | 33 | 0.5833 | 132.9815 | 3.16 | 11.3142 | 0.14748 | 0.0196 | 0.0345 | 1 |
| 2011 | 33 | 0.5116 | 136.7557 | 3.44 | 11.2985 | 0.15067 | 0.0195 | 0.061 | 1 |
| 2012 | 33 | 0.4558 | 126.6982 | 4.1 | 11.3444 | 0.10589 | 0.0204 | 0.0626 | 1 |
| 2008 | 34 | 0.3492 | 168.6445 | 2.57 | 11.8612 | 0.15481 | 0.0249 | 0.1175 | 1 |
| 2009 | 34 | 0.3584 | 129.5001 | 3.92 | 11.8279 | 0.08307 | 0.0723 | 0.1376 | 1 |
| 2010 | 34 | 0.5511 | 137.1697 | 2.74 | 11.8117 | 0.04368 | 0.0595 | 0.1399 | 1 |
| 2011 | 34 | 0.7780 | 224.4304 | 3.48 | 11.7933 | 0.05863 | 0.0564 | 0.1616 | 1 |
| 2012 | 34 | 0.5978 | 212.2657 | 6.16 | 11.8168 | 0.0792 | 0.0561 | 0.2262 | 1 |
| 2008 | 35 | 0.4152 | 377.836 | 0.94 | 11.9357 | 0.4918 | 0 | 0.0339 | 0 |
| 2009 | 35 | 0.4481 | 398.269 | 0.9 | 11.8897 | 0.55119 | 0 | 0.0137 | 0 |
| 2010 | 35 | 0.4909 | 377.9146 | 0.81 | 11.8152 | 0.60347 | 0 | -0.0374 | 0 |
| 2011 | 35 | 0.2398 | 349.9704 | 0.93 | 11.7794 | 0.4868 | 0 | -0.0635 | 0 |
| 2012 | 35 | 0.4459 | 321.0659 | 0.57 | 11.4792 | 0.62596 | 0 | -0.157 | 0 |
| 2008 | 36 | 0.5082 | 56.90434 | 1.45 | 12.5533 | 0.204 | 0.1784 | 0.0239 | 0 |
| 2009 | 36 | 0.2838 | 61.28407 | 1.31 | 12.5134 | 0.29044 | 0.1734 | 0.0177 | 0 |
| 2010 | 36 | 0.2822 | 82.93907 | 1.42 | 12.4367 | 0.2707 | 0.1691 | 0.022 | 0 |
| 2011 | 36 | 0.2158 | 90.93422 | 1.6 | 12.5508 | 0.26508 | 0.1684 | 0.0494 | 1 |
| 2012 | 36 | 0.3172 | 87.33213 | 1.81 | 12.6654 | 0.24932 | 0.168 | 0.0856 | 1 |
| 2008 | 37 | 0.6682 | 382.1541 | 10 | 9.33618 | 0.03745 | 0 | -0.0411 | 0 |
| 2009 | 37 | 0.4075 | 214.3448 | 10.9 | 9.84422 | 0.02346 | 0 | 0.0063 | 0 |
| 2010 | 37 | 0.6442 | 207.0367 | 13.9 | 9.82461 | 0.0106 | 0 | -0.0008 | 0 |
| 2011 | 37 | 0.6846 | 287.43 | 12.4 | 9.67168 | 0.01522 | 0 | -0.0243 | 0 |
| 2012 | 37 | 0.5023 | 211.9275 | 21.4 | 9.3739 | 0.00227 | 0 | -0.08 | 0 |
| 2008 | 38 | 0.7246 | 59.4195 | 2.57 | 12.7357 | 0.04284 | 0 | 0.0782 | 1 |
| 2009 | 38 | 0.6572 | 48.19184 | 2.83 | 12.869 | 0.00148 | 0 | 0.0875 | 1 |
| 2010 | 38 | 0.6771 | 57.18237 | 2.94 | 12.8392 | 0.0005 | 0 | 0.1118 | 1 |

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|---|---|---|---|---|---|---|---|---|---|
| 2011 | 38 | 0.6921 | 60.83018 | 2.87 | 13.0028 | 0 | 0 | 0.1099 | 1 |
| 2012 | 38 | 0.7571 | 51.56249 | 3.4 | 13.1884 | 0 | 0 | 0.1722 | 1 |
| 2008 | 39 | 1.6681 | 96.63816 | 1.43 | 12.6319 | 0.13769 | 0 | 0.151 | 1 |
| 2009 | 39 | 1.7679 | 101.5801 | 1.58 | 12.7898 | 0.14298 | 0 | 0.1938 | 1 |
| 2010 | 39 | 2.8752 | 107.8891 | 1.97 | 12.8561 | 0.11209 | 0 | 0.2271 | 1 |
| 2011 | 39 | 2.4375 | 113.6674 | 1.55 | 12.9486 | 0.19244 | 0 | 0.1736 | 1 |
| 2012 | 39 | 1.9626 | 120.556 | 1.7 | 13.0165 | 0.21751 | 0 | 0.1359 | 1 |
| 2008 | 40 | 1.1611 | 56.71752 | 2.17 | 12.6282 | 0.27697 | 0 | -0.0738 | 1 |
| 2009 | 40 | 1.0776 | 29.30459 | 2.99 | 12.6512 | 0.22279 | 0 | 0.0741 | 1 |
| 2010 | 40 | 1.0926 | 90.19851 | 3.24 | 11.8749 | 0.19488 | 0 | 0.0245 | 1 |
| 2011 | 40 | 0.9041 | 30.08193 | 2.18 | 12.3895 | 0.08437 | 0 | 0.05 | 1 |
| 2012 | 40 | 0.7147 | 27.53552 | 3.08 | 12.4731 | 0.03552 | 0 | 0.0365 | 1 |
| 2008 | 41 | 2.4836 | 90.83816 | 2.07 | 12.8566 | 0.10687 | 0 | 0.2215 | 1 |
| 2009 | 41 | 1.6441 | 74.04523 | 2.52 | 13.0721 | 0.11032 | 0 | 0.2395 | 1 |
| 2010 | 41 | 2.1163 | 34.16164 | 2.37 | 13.1633 | 0.10223 | 0.0201 | 0.2464 | 1 |
| 2011 | 41 | 2.4662 | 75.24069 | 2.54 | 13.2507 | 0.10637 | 0.015 | 0.2408 | 1 |
| 2012 | 41 | 2.8815 | 83.28877 | 3.16 | 13.4917 | 0.10556 | 0.0152 | 0.2765 | 1 |
| 2008 | 42 | 0.3588 | 112.85 | 1.03 | 13.0856 | 0.48174 | ###### | -0.0231 | 0 |
| 2009 | 42 | 0.1711 | 101.4285 | 0.88 | 13.2966 | 0.49623 | ###### | -0.0183 | 0 |
| 2010 | 42 | 0.3669 | 83.71507 | 1.22 | 13.0135 | 0.37428 | ###### | 0.0294 | 0 |
| 2011 | 42 | 0.2722 | 96.82244 | 1.32 | 12.8451 | 0.35934 | ###### | 0.0024 | 0 |
| 2012 | 42 | 0.2495 | 98.88729 | 1.41 | 12.7938 | 0.35726 | ###### | 0.0293 | 0 |
| 2008 | 43 | 0.3611 | 60.08775 | 1.22 | 12.0244 | 0.30182 | 0.0346 | -0.011 | 0 |
| 2009 | 43 | 0.3055 | 56.03379 | 1.42 | 11.8957 | 0.2568 | 0.0372 | 0.0515 | 0 |
| 2010 | 43 | 0.3655 | 70.4 | 1.64 | 11.8268 | 0.16293 | 0.0316 | 0.0786 | 0 |
| 2011 | 43 | 0.2819 | 70.92869 | 1.42 | 12.1252 | 0.15166 | 0.0284 | 0.0617 | 0 |
| 2012 | 43 | 0.4338 | 33.76141 | 2.11 | 12.1521 | 0.05448 | 0.03 | 0.1239 | 1 |
| 2008 | 44 | 0.4155 | 672.3589 | 3.8 | 11.0454 | 0.35666 | 0 | -0.0334 | 0 |
| 2009 | 44 | -43.5157 | -19465.7 | 0.98 | 7.28001 | 0 | 0 | -1.2126 | 0 |
| 2010 | 44 | 0.2004 | 88.28515 | 3.27 | 12.5432 | 0.09329 | 0 | 0.1973 | 0 |
| 2011 | 44 | 1.6636 | 194.0965 | 4.1 | 11.9289 | 0.10408 | 0 | 0.0494 | 0 |
| 2012 | 44 | 1.2258 | 161.1001 | 6.02 | 12.0053 | 0.0781 | 0 | 0.0354 | 0 |
| 2008 | 45 | 0.9293 | 210.7424 | 0.94 | 10.1074 | 0.42435 | 0 | -0.0134 | 0 |
| 2009 | 45 | 0.8890 | 179.0645 | 0.84 | 9.9936 | 0.41916 | 0 | -0.0445 | 0 |
| 2010 | 45 | 0.9284 | 170.7422 | 0.73 | 9.85456 | 0.36514 | 0 | -0.0182 | 0 |
| 2011 | 45 | 1.1869 | 149.1074 | 0.62 | 9.73175 | 0.36268 | 0 | -0.0429 | 0 |
| 2012 | 45 | 0.7069 | 185.7546 | 2.84 | 10.6561 | 0.15557 | 0.0069 | -0.024 | 0 |
| 2008 | 46 | 0.3678 | 177.8703 | 1.6 | 11.5173 | 0.3853 | 0.0002 | 0.1696 | 0 |

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|---|---|---|---|---|---|---|---|---|---|
| 2009 | 46 | 0.3799 | 186.3759 | 2.04 | 11.5247 | 0.25083 | 0.0002 | 0.11 | 1 |
| 2010 | 46 | 0.7648 | 185.5157 | 2.17 | 11.5401 | 0.20137 | 0 | 0.1347 | 1 |
| 2011 | 46 | 0.8574 | 234.2322 | 1.87 | 11.602 | 0.19243 | 0 | 0.1091 | 1 |
| 2012 | 46 | 0.9167 | 192.7522 | 2.19 | 11.5769 | 0.12988 | 0 | 0.1083 | 1 |
| 2008 | 47 | 0.8028 | 241.9313 | 2.06 | 12.5756 | 0.43206 | 0 | 0.1141 | 1 |
| 2009 | 47 | 0.4674 | 253.5506 | 2 | 12.6145 | 0.38858 | 0 | 0.1242 | 1 |
| 2010 | 47 | 0.4908 | 255.7323 | 2.25 | 12.7835 | 0.3864 | 0 | 0.1226 | 1 |
| 2011 | 47 | 0.5444 | 237.7725 | 2.1 | 13.1331 | 0.42959 | 0 | 0.1396 | 1 |
| 2012 | 47 | 0.6153 | 222.6138 | 2.25 | 13.2762 | 0.44961 | 0 | 0.0816 | 1 |
| 2008 | 48 | 1.2147 | 173.3437 | 1.8 | 11.9147 | 0.23912 | 0.003 | 0.1099 | 0 |
| 2009 | 48 | 1.0041 | 155.3844 | 2.04 | 11.9165 | 0.20057 | 0.0033 | 0.0743 | 1 |
| 2010 | 48 | 1.0127 | 168.9738 | 2.04 | 12.0148 | 0.20198 | 0.0055 | 0.0901 | 1 |
| 2011 | 48 | 0.7509 | 164.9278 | 2.06 | 12.118 | 0.22866 | 0.005 | 0.0818 | 1 |
| 2012 | 48 | 0.6932 | 204.8096 | 1.91 | 12.1186 | 0.23871 | 0.0044 | 0.0526 | 0 |
| 2008 | 49 | 0.6817 | 117.2637 | 1.94 | 12.3815 | 0.33416 | 0 | 0.0883 | 1 |
| 2009 | 49 | 0.3030 | 131.6258 | 1.89 | 12.2364 | 0.33096 | 0 | 0.1177 | 1 |
| 2010 | 49 | 0.4828 | 125.6035 | 2.34 | 12.383 | 0.26189 | 0 | 0.0913 | 1 |
| 2011 | 49 | 0.6264 | 135.0091 | 1.84 | 12.4526 | 0.2639 | 0 | 0.0819 | 1 |
| 2012 | 49 | 0.5710 | 122.1749 | 2.27 | 12.4666 | 0.3053 | 0 | 0.0626 | 1 |
| 2008 | 50 | 0.6944 | 364.7943 | 7.79 | 10.9468 | 0.06004 | 0.0585 | 0.0207 | 0 |
| 2009 | 50 | 0.5579 | 354.8281 | 4.53 | 11.1481 | 0.07553 | 0.0491 | 0.0473 | 1 |
| 2010 | 50 | 0.9203 | 498.8777 | 2.81 | 10.7955 | 0.16207 | 0.0445 | -0.014 | 1 |
| 2011 | 50 | 0.5850 | 463.3449 | 2.27 | 10.6748 | 0.18144 | 0.0284 | -0.1899 | 1 |
| 2012 | 50 | 0.7062 | 358.7296 | 1.67 | 10.5817 | 0.15806 | 0.0216 | -0.1313 | 0 |
| 2008 | 51 | 1.2960 | 100.9838 | 3.47 | 12.6234 | 0 | 0 | 0.2243 | 1 |
| 2009 | 51 | 1.2394 | 89.89576 | 4.46 | 12.6612 | 0 | 0.0354 | 0.2298 | 1 |
| 2010 | 51 | 2.4600 | 81.65493 | 4.45 | 12.6842 | 0 | 0.0029 | 0.1864 | 1 |
| 2011 | 51 | 2.0869 | 80.43961 | 4.55 | 12.787 | 0 | 0.0026 | 0.1787 | 1 |
| 2012 | 51 | 2.0156 | 89.85519 | 3.83 | 13.0179 | 0 | 0.0022 | 0.1787 | 1 |
| 2008 | 52 | 0.5300 | 90.39596 | 4.07 | 10.6603 | 0.04038 | 0.0045 | 0.0907 | 1 |
| 2009 | 52 | 0.4486 | 43.55876 | 6.68 | 10.9087 | 0.00268 | 0.0043 | 0.0887 | 1 |
| 2010 | 52 | 0.7779 | 90.66513 | 2.04 | 11.6348 | 0.00011 | 0.043 | 0.127 | 1 |
| 2011 | 52 | 0.6130 | 96.81347 | 3.38 | 11.8373 | 6.09E-05 | 0.0396 | 0.1302 | 1 |
| 2012 | 52 | 0.5860 | 126.9296 | 4.61 | 11.6991 | 0.01727 | 0.039 | 0.0984 | 1 |
| 2008 | 53 | 0.6786 | 128.2251 | 2.68 | 11.4937 | 0.0989 | 0.1248 | -0.0864 | 0 |
| 2009 | 53 | 0.4644 | 178.945 | 2.42 | 11.4854 | 0.08719 | 0.1197 | 0.0685 | 0 |
| 2010 | 53 | 0.8992 | 70.66683 | 2 | 12.1268 | 0.04382 | 0.0853 | 0.1631 | 1 |
| 2011 | 53 | 0.8635 | 74.29397 | 2.11 | 11.9441 | 0.04471 | 0.0824 | 0.104 | 1 |
| 2012 | 53 | 0.9248 | 179.4957 | 2.85 | 11.6193 | 0.05378 | 0.0522 | 0.0425 | 1 |
| 2008 | 54 | 0.6619 | 282.542 | 5.89 | 10.4722 | 0.05952 | 0 | 0.1219 | 0 |

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|---|---|---|---|---|---|---|---|---|---|
| 2009 | 54 | 0.6922 | 150.9766 | 9.94 | 10.8876 | 0.00156 | 0 | 0.1481 | 1 |
| 2010 | 54 | 1.3004 | 165.5057 | 7.81 | 10.7968 | 0.01731 | 0 | 0.1136 | 1 |
| 2011 | 54 | 1.0903 | 143.4768 | 10.7 | 10.7395 | 0.03182 | 0 | 0.1097 | 1 |
| 2012 | 54 | 1.0307 | 172.9532 | 13.9 | 10.7441 | 0.01729 | 0 | 0.0884 | 1 |
| 2008 | 55 | 0.2938 | 97.00359 | 0.85 | 11.5861 | 0.36705 | 0.6498 | 0.0259 | 0 |
| 2009 | 55 | 0.1290 | 61.27928 | 0.85 | 11.9624 | 0.29646 | 0.6334 | 0.0621 | 0 |
| 2010 | 55 | 0.3825 | 46.1745 | 0.78 | 12.0186 | 0.22166 | 0.6277 | 0.0867 | 0 |
| 2011 | 55 | 0.4424 | 50.90276 | 0.77 | 12.1252 | 0.22622 | 0.595 | 0.0918 | 0 |
| 2012 | 55 | 1.1341 | 50.89177 | 1.08 | 12.1891 | 0.16022 | 0.5837 | 0.0864 | 0 |
| 2008 | 56 | 1.3331 | 30.67444 | 3.84 | 13.4401 | 0.00949 | 0.4785 | 0.0075 | 0 |
| 2009 | 56 | 2.7982 | 8.874231 | 2.16 | 13.5051 | 0.00059 | 0.3215 | -0.6304 | 0 |
| 2010 | 56 | 1.3945 | 16.20944 | 1.66 | 13.3659 | 0.09353 | 0.2752 | -0.092 | 0 |
| 2011 | 56 | 1.8927 | 8.533385 | 1.25 | 13.3339 | 0.09182 | 0.2146 | -0.2062 | 0 |
| 2012 | 56 | 3.0178 | 12.0492 | 1.14 | 13.1696 | 0.13263 | 0.221 | -0.0701 | 0 |
| 2008 | 57 | 0.4900 | 196.9083 | 3.03 | 10.7315 | 0.34716 | 0.0176 | 0.0417 | 0 |
| 2009 | 57 | 0.2998 | 165.6466 | 1.73 | 10.7822 | 0.34526 | 0.0172 | 0.0388 | 0 |
| 2010 | 57 | 0.5926 | 152.1925 | 3.18 | 10.8821 | 0.25016 | 0.018 | 0.0806 | 0 |
| 2011 | 57 | 0.4932 | 154.6079 | 3.73 | 10.9122 | 0.21372 | 0.0177 | 0.0816 | 0 |
| 2012 | 57 | 0.5311 | 166.5652 | 3.11 | 10.91 | 0.20107 | 0.0171 | 0.0609 | 0 |
| 2008 | 58 | 0.6895 | 45.67253 | 1.17 | 15.1027 | 0.34141 | 0.0107 | 0.0262 | 1 |
| 2009 | 58 | 0.4111 | 33.44656 | 1.28 | 15.0852 | 0.23854 | 0.0413 | 0.045 | 1 |
| 2010 | 58 | 0.6709 | 30.82655 | 1.27 | 15.1681 | 0.20953 | 0.009 | 0.0476 | 1 |
| 2011 | 58 | 0.7179 | 31.8141 | 1.27 | 15.265 | 0.17137 | 0.0072 | 0.0607 | 1 |
| 2012 | 58 | 1.1218 | 35.51862 | 1.35 | 15.3727 | 0.1194 | 0.0062 | 0.0884 | 1 |
| 2008 | 59 | 1.5891 | 131.1669 | 6.44 | 10.9937 | 0.08659 | 0.0221 | 0.1787 | 1 |
| 2009 | 59 | 0.8040 | 90.46651 | 10.2 | 11.0891 | 0.07071 | 0.021 | 0.1614 | 1 |
| 2010 | 59 | 1.3842 | 154.4095 | 12.8 | 10.9811 | 0.06255 | 0.0165 | 0.1208 | 1 |
| 2011 | 59 | 0.9880 | 197.7678 | 14.3 | 10.8669 | 0.04837 | 0.0165 | 0.0466 | 1 |
| 2012 | 59 | 1.0977 | 204.4167 | 17.7 | 10.6441 | 0.03993 | 0.0149 | 0.0399 | 0 |
| 2008 | 60 | 0.8744 | 123.1174 | 1.11 | 12.0827 | 0.10449 | 0.0015 | 0.1149 | 1 |
| 2009 | 60 | 0.6691 | 116.2499 | 1.41 | 12.317 | 0.11636 | 0.0014 | 0.1605 | 1 |
| 2010 | 60 | 1.1940 | 101.5739 | 1.87 | 12.5394 | 0.09049 | 0.0011 | 0.177 | 1 |
| 2011 | 60 | 1.2986 | 99.42117 | 2.67 | 12.6065 | 0.07732 | 0.001 | 0.2173 | 1 |
| 2012 | 60 | 1.1534 | 75.09413 | 3.84 | 12.6121 | 0.00375 | 0.0009 | 0.1904 | 1 |
| 2008 | 61 | 0.3740 | 43.49409 | 2.03 | 13.8661 | 0.08742 | 0 | 0.0897 | 1 |
| 2009 | 61 | 0.4102 | 47.357 | 2.02 | 13.8706 | 0.06584 | 0 | 0.0945 | 1 |
| 2010 | 61 | 0.6908 | 49.57685 | 2.05 | 13.9848 | 0.07388 | 0 | 0.1068 | 1 |
| 2011 | 61 | 0.8206 | 49.50256 | 1.94 | 14.0585 | 0.11662 | 0 | 0.0964 | 1 |
| 2012 | 61 | 0.7564 | 57.7468 | 2.06 | 14.1273 | 0.12824 | 0 | 0.0829 | 1 |
| 2008 | 62 | 0.5169 | 73.52881 | 1.53 | 13.5191 | 0.2184 | 0.0025 | 0.0746 | 1 |

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|---|---|---|---|---|---|---|---|---|---|
| 2009 | 62 | 0.4670 | 76.02345 | 1.61 | 13.4573 | 0.20383 | 0.0025 | 0.0742 | 1 |
| 2010 | 62 | 0.4128 | 75.65694 | 1.41 | 13.3887 | 0.21057 | 0.0041 | 0.0358 | 1 |
| 2011 | 62 | 0.3549 | 88.47762 | 1.35 | 13.3659 | 0.22645 | 0.004 | 0.0365 | 1 |
| 2012 | 62 | 0.3337 | 87.2354 | 1.31 | 13.3957 | 0.26877 | 0.0037 | 0.0259 | 1 |
| 2008 | 63 | 4.7566 | 38.25097 | 2.96 | 11.536 | 0.00617 | 0.0215 | 0.2922 | 1 |
| 2009 | 63 | 2.5171 | 41.46029 | 7.95 | 11.4332 | 0.00424 | 0.0189 | 0.2388 | 1 |
| 2010 | 63 | 3.8896 | 38.90088 | 6.46 | 11.6708 | 0.00261 | 0.0131 | 0.2541 | 1 |
| 2011 | 63 | 4.7841 | 34.28506 | 6.36 | 11.8484 | 0.00169 | 0.0113 | 0.2338 | 1 |
| 2012 | 63 | 3.3603 | 3.289311 | 2.16 | 11.9878 | 0.00073 | 0 | 0.2736 | 1 |
| 2008 | 64 | 0.6943 | 327.1237 | 1.43 | 10.8525 | 0.08742 | 0.0199 | -0.0679 | 0 |
| 2009 | 64 | 0.4531 | 283.0371 | 1.4 | 10.994 | 0.07189 | 0.0176 | 0.0094 | 0 |
| 2010 | 64 | 0.8371 | 174.0798 | 1.12 | 11.1714 | 0.07622 | 0.0063 | -0.0192 | 0 |
| 2011 | 64 | 0.6732 | 159.9364 | 1.11 | 10.9444 | 0.04174 | 0.0018 | -0.0179 | 0 |
| 2012 | 64 | 3.5806 | -470.619 | 0.87 | 10.4954 | 0.03211 | ###### | -0.2083 | 0 |
| 2008 | 65 | 4.9357 | 37.63704 | 6.16 | 10.8052 | 0.11279 | 0.328 | 0.2631 | 1 |
| 2009 | 65 | 3.4172 | 57.26077 | 3.71 | 10.8682 | 0.0715 | 0.2572 | 0.2208 | 1 |
| 2010 | 65 | 3.0604 | 177.8162 | 4.8 | 10.7725 | 0.07227 | 0.2315 | 0.2258 | 1 |
| 2011 | 65 | 4.4786 | 94.7351 | 2.04 | 10.9825 | 0.0864 | 0.1845 | 0.1959 | 1 |
| 2012 | 65 | 3.2663 | 143.4825 | 2.25 | 11.1113 | 0.0776 | 0.1545 | 0.1896 | 1 |
| 2008 | 66 | 0.6364 | -133.344 | 1.24 | 9.76537 | 0.17048 | 0.0076 | -0.0055 | 0 |
| 2009 | 66 | 0.7085 | 167.1527 | 0.54 | 10.1887 | 0.15586 | 0 | 0.0617 | 0 |
| 2010 | 66 | 0.5730 | 25.41451 | 0.34 | 10.27 | 0.1665 | 0 | 0.082 | 0 |
| 2011 | 66 | 0.4552 | -8.96414 | 0.28 | 10.047 | 0.15445 | 0 | -0.0098 | 0 |
| 2012 | 66 | 1.4374 | 111.9898 | 0.66 | 9.75921 | 0.27286 | 0 | -0.4705 | 0 |
| 2008 | 67 | 4.4373 | 93.88254 | 2.53 | 11.1766 | 0.10141 | 0.116 | 0.187 | 1 |
| 2009 | 67 | 3.3166 | 146.5109 | 2.63 | 11.2216 | 0.10664 | 0.1131 | 0.1335 | 1 |
| 2010 | 67 | 2.0677 | 118.0203 | 4.79 | 11.338 | 0.00669 | 0.1138 | 0 | 1 |
| 2011 | 67 | 1.6829 | 131.6131 | 4.87 | 11.3834 | 0.007 | 0.1041 | 0.1869 | 1 |
| 2012 | 67 | 1.2435 | 146.9161 | 1.49 | 11.4009 | 0.13105 | 0.0805 | 0.1317 | 1 |
| 2008 | 68 | 2.1405 | 74.44924 | 3.68 | 11.6807 | 0.005 | 0 | 0.11 | 1 |
| 2009 | 68 | 1.2870 | 86.91618 | 3.93 | 11.8822 | 0.01228 | 0 | 0.1507 | 1 |
| 2010 | 68 | 2.1946 | 97.9687 | 5.52 | 11.7172 | 0.00738 | 0 | 0.1155 | 1 |
| 2011 | 68 | 1.9480 | 87.94176 | 7.14 | 11.8563 | 0 | 0 | 0.1775 | 1 |
| 2012 | 68 | 1.8114 | 94.33047 | 8.87 | 11.7847 | 0 | 0 | 0.1827 | 1 |
| 2008 | 69 | 0.9524 | 122.8184 | 2.62 | 11.9739 | 0.14731 | 0.5133 | 0.0434 | 1 |
| 2009 | 69 | 0.7847 | 75.30873 | 2.95 | 12.0466 | 0.13837 | 0.5192 | 0.0433 | 1 |
| 2010 | 69 | 0.9171 | 86.79604 | 2.35 | 12.0701 | 0.17595 | 0.5371 | -0.0706 | 0 |

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|---|---|---|---|---|---|---|---|---|---|
| 2011 | 69 | 0.6075 | 77.04137 | 1.71 | 12.1328 | 0.17072 | 0.5898 | 0.0123 | 0 |
| 2012 | 69 | 0.6584 | 97.73643 | 1.63 | 11.6801 | 0.14654 | 0.4088 | -0.1693 | 0 |
| 2008 | 70 | 0.6840 | 147.2485 | 1.27 | 12.1338 | 0.41429 | 0.1408 | 0.0696 | 1 |
| 2009 | 70 | 0.6724 | 85.53469 | 1.29 | 12.7026 | 0.39745 | 0.1199 | 0.0776 | 1 |
| 2010 | 70 | 0.8299 | 93.73279 | 1.32 | 12.7789 | 0.29177 | 0.0995 | 0.0617 | 1 |
| 2011 | 70 | 0.8104 | 85.5579 | 1.43 | 12.8702 | 0.25969 | 0.0899 | 0.1026 | 1 |
| 2012 | 70 | 0.9249 | 71.00524 | 1.45 | 12.9192 | 0.2043 | 0.0811 | 0.1069 | 1 |
| 2008 | 71 | 0.5054 | 107.0374 | 1.18 | 13.0883 | 0.52798 | 0.0002 | 0.0958 | 1 |
| 2009 | 71 | 0.3440 | 65.06318 | 1.37 | 13.363 | 0.37293 | 0.0003 | 0.116 | 1 |
| 2010 | 71 | 0.5522 | 104.2648 | 1.31 | 13.0611 | 0.40674 | 0.0002 | 0.0608 | 1 |
| 2011 | 71 | 0.5963 | 113.9898 | 1.16 | 13.3705 | 0.49393 | 0.0003 | 0.0857 | 1 |
| 2012 | 71 | 2.1294 | 112.0453 | 1.14 | 13.4812 | 0.50836 | 0.0002 | 0.0888 | 1 |
| 2008 | 72 | 2.3855 | 65.84595 | 5.33 | 11.6876 | 0 | 0 | 0.2234 | 1 |
| 2009 | 72 | 1.6235 | 48.55335 | 10.8 | 11.2775 | 0 | 0.0259 | 0.1704 | 1 |
| 2010 | 72 | 2.3005 | 45.18086 | 7.19 | 11.478 | 0 | 0 | 0.1867 | 1 |
| 2011 | 72 | 2.0454 | 62.0906 | 5.85 | 11.8265 | 0 | 0 | 0.2473 | 1 |
| 2012 | 72 | 2.6311 | 48.00526 | 6.21 | 11.9459 | 0 | 0 | 0.331 | 1 |
| 2008 | 73 | 0.2484 | 132.9433 | 1.24 | 12.0985 | 0.27785 | 0 | 0.0228 | 0 |
| 2009 | 73 | 0.1957 | 146.2848 | 1.21 | 11.9162 | 0.2835 | 0 | -0.0036 | 0 |
| 2010 | 73 | 0.2447 | 116.3516 | 1.22 | 12.0339 | 0.23909 | 0 | 0.0021 | 0 |
| 2011 | 73 | 0.3293 | 45.3542 | 1.18 | 12.226 | 0.24909 | 0 | 0.0232 | 0 |
| 2012 | 73 | 0.3567 | 69.62516 | 1.19 | 12.2945 | 0.35146 | 0 | -0.0779 | 0 |
| 2008 | 74 | 0.4884 | 337.1266 | 4.63 | 10.5618 | 0.46595 | 0 | 0.1458 | 1 |
| 2009 | 74 | 0.4656 | 156.6007 | 1.74 | 10.0178 | 0.66668 | 0 | -0.285 | 0 |
| 2010 | 74 | 2.1462 | 71.05188 | 1.87 | 9.68272 | 0.77114 | 0 | 0.1497 | 0 |
| 2011 | 74 | 0.7131 | 71.1237 | 0.51 | 9.55556 | 0.65496 | 0 | 0.1752 | 0 |
| 2012 | 74 | 2.8644 | 39.01837 | 0.32 | 8.9597 | 0.6777 | 0 | -0.1113 | 0 |
| 2008 | 75 | 2.7897 | 49.80302 | 3.25 | 13.7749 | 0.01008 | 0.0132 | 0.1612 | 1 |
| 2009 | 75 | 2.1774 | -14.3346 | 1.12 | 13.86 | 0.00908 | 0.4134 | 0.1071 | 0 |
| 2010 | 75 | 2.6840 | 21.62162 | 1.31 | 14.129 | 0.05687 | 0.428 | 0.1887 | 0 |
| 2011 | 75 | 3.8548 | 21.66783 | 1.46 | 14.2139 | 0.02316 | 0.4277 | 0.2257 | 0 |
| 2012 | 75 | 11.6117 | 21.96154 | 1.51 | 14.276 | 0.0088 | 0.0165 | 0.4276 | 0 |
| 2008 | 76 | 1.1007 | 89.56638 | 0.97 | 12.5792 | 0.32023 | 0.1835 | 0.0781 | 1 |
| 2009 | 76 | 0.8645 | 88.44423 | 1.29 | 12.8021 | 0.26666 | 0.1618 | 0.1118 | 1 |
| 2010 | 76 | 1.8299 | 87.72635 | 1.27 | 13.1546 | 0.24412 | 0.1227 | 0.132 | 1 |
| 2011 | 76 | 2.2923 | 96.59408 | 1.6 | 13.2721 | 0.35359 | 0.0958 | 0.1201 | 1 |
| 2012 | 76 | 1.7729 | 212.7067 | 16.4 | 10.6175 | 0.02088 | ###### | 5.5471 | 0 |
| 2008 | 77 | 2.4261 | 92.25387 | 1.81 | 15.094 | 0.17879 | 0.0371 | 0.1032 | 1 |

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|---|---|---|---|---|---|---|---|---|---|
| 2009 | 77 | 2.3832 | 91.29593 | 1.5 | 15.1338 | 0.20584 | 0.0481 | 0.1159 | 1 |
| 2010 | 77 | 2.1543 | 76.87361 | 2.09 | 15.1069 | 0.10119 | 0.0422 | 0.1336 | 1 |
| 2011 | 77 | 3.9013 | 62.43572 | 1.78 | 15.1804 | 0.0607 | 0.0515 | 0.1864 | 1 |
| 2012 | 77 | 4.3673 | 77.57117 | 1.18 | 14.9907 | 0.16766 | 0.0534 | 0.0932 | 1 |
| 2008 | 78 | 4.1113 | 30.99714 | 2.15 | 13.9933 | 0 | 0.0048 | 0.2729 | 1 |
| 2009 | 78 | 3.8577 | 40.68482 | 2.37 | 14.0666 | 0 | 0.0101 | 0.2968 | 1 |
| 2010 | 78 | 4.4762 | 50.15928 | 2.65 | 14.122 | 0 | 0.0158 | 0.3106 | 1 |
| 2011 | 78 | 5.8577 | 50.1267 | 3.32 | 14.2134 | 0 | 0.0133 | 0.3551 | 1 |
| 2012 | 78 | 10.1106 | 65.33883 | 2.38 | 14.3002 | 0.2566 | 0.0332 | 0.3612 | 1 |
| 2008 | 79 | 1.1990 | 192.2784 | 6.69 | 12.0922 | 0.06855 | 0.0207 | 0.2055 | 1 |
| 2009 | 79 | 0.4958 | 215.31 | 5.03 | 11.8361 | 0.03203 | 0.0223 | 0.0461 | 1 |
| 2010 | 79 | 0.9069 | 156.2443 | 4.57 | 11.9389 | 0.02194 | 0.0239 | 0.0589 | 1 |
| 2011 | 79 | 1.0078 | 166.8789 | 3.73 | 12.1272 | 0.02873 | 0.0244 | 0.0691 | 1 |
| 2012 | 79 | 0.8302 | 165.294 | 3.42 | 12.2878 | 0.03752 | 0.023 | 0.0846 | 1 |
| 2008 | 80 | 0.5620 | 188.6951 | 2.3 | 11.5003 | 0.14642 | 0.0002 | 0.0563 | 1 |
| 2009 | 80 | 0.5699 | 152.5439 | 2.44 | 11.5922 | 0.17385 | 0.0002 | 0.0542 | 1 |
| 2010 | 80 | 0.9237 | 158.9451 | 1.62 | 11.7878 | 0.31081 | 0.0002 | 0.0683 | 1 |
| 2011 | 80 | 0.8740 | 142.5774 | 1.21 | 11.9028 | 0.35326 | 0.0002 | 0.0515 | 1 |
| 2012 | 80 | 0.7178 | 133.6758 | 1.17 | 12.0907 | 0.32937 | 0.0001 | 0.0696 | 1 |
| 2008 | 81 | 0.8369 | 69.66885 | 4.18 | 12.2805 | 0 | 0 | 0.1251 | 1 |
| 2009 | 81 | 0.9179 | 101.1418 | 5.07 | 12.4043 | 0 | 0 | 0.1174 | 1 |
| 2010 | 81 | 1.4475 | 79.01278 | 5.38 | 12.5589 | 0 | 0 | 0.1289 | 1 |
| 2011 | 81 | 1.0962 | 84.85515 | 4.08 | 12.664 | 0 | 0.001 | 0.1182 | 1 |
| 2012 | 81 | 1.0619 | 90.64963 | 5.68 | 12.6905 | 0 | 0.001 | 0.1224 | 1 |
| 2008 | 82 | 1.1839 | 90.44804 | 9.19 | 12.107 | 0 | 0 | 0.1213 | 1 |
| 2009 | 82 | 0.9737 | 79.36919 | 14.2 | 12.0745 | 0 | 0 | 0.1209 | 1 |
| 2010 | 82 | 1.1615 | 80.45828 | 12.8 | 11.98 | 0 | 0 | 0.142 | 1 |
| 2011 | 82 | 1.1934 | 80.91028 | 12.3 | 12.0799 | 0 | 0 | 0.0966 | 1 |
| 2012 | 82 | 1.1081 | 73.20275 | 13.5 | 12.2088 | 0 | 0 | 0.119 | 1 |
| 2008 | 83 | 1.1643 | 39.96797 | 1.77 | 11.2732 | 0.00487 | 0 | 0.0908 | 1 |
| 2009 | 83 | 1.0476 | 63.07365 | 1.53 | 10.7185 | 0.00289 | 0 | 0.0112 | 1 |
| 2010 | 83 | 1.0142 | 10.34102 | 2.03 | 10.4805 | 0.00357 | 0 | 0.0668 | 1 |
| 2011 | 83 | 0.9482 | 10.19122 | 2.32 | 10.6371 | 0.00554 | 0 | 0.0657 | 1 |
| 2012 | 83 | 0.9254 | -20.4412 | 1.27 | 10.5147 | 0.0038 | 0 | 0.0431 | 1 |
| 2008 | 84 | 0.7874 | 28.79232 | 0.94 | 13.1581 | 0.32108 | ###### | 0.0698 | 1 |
| 2009 | 84 | 0.5385 | 41.70709 | 1.01 | 13.6208 | 0.34082 | 0.1535 | 0.0489 | 1 |
| 2010 | 84 | 0.6454 | 22.32722 | 1.21 | 14.0894 | 0.32523 | ###### | 0.0827 | 1 |
| 2011 | 84 | 0.7489 | 11.1348 | 1.14 | 14.4556 | 0.27715 | ###### | 0.1059 | 1 |
| 2012 | 84 | 1.1853 | 18.44297 | 1.31 | 14.4646 | 0.31274 | ###### | 0.0905 | 1 |
| 2008 | 85 | 0.6234 | 30.39222 | 0.8 | 13.2286 | 0.33196 | 0.0094 | 0.0327 | 0 |
| 2009 | 85 | 0.5089 | 30.98333 | 0.77 | 13.1111 | 0.36127 | 0.0421 | 0.0253 | 0 |
| 2010 | 85 | 0.4443 | 29.86885 | 0.78 | 13.1385 | 0.35769 | 0.0106 | 0.062 | 0 |
| 2011 | 85 | 0.4194 | 30.73126 | 0.77 | 13.1041 | 0.34874 | 0.0074 | 0.0921 | 0 |

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|---|---|---|---|---|---|---|---|---|---|
| 2012 | 85 | 0.3821 | 21.05797 | 0.7 | 13.1892 | 0.33945 | 0.0058 | 0.0166 | 0 |
| 2008 | 86 | 0.9970 | 78.82605 | 2.86 | 12.5632 | 0.09037 | 0.0004 | 0.1041 | 1 |
| 2009 | 86 | 0.6604 | 68.89136 | 3.24 | 12.7025 | 0.07934 | 0 | 0.1118 | 1 |
| 2010 | 86 | 0.8647 | 63.9213 | 3.51 | 12.7819 | 0.06296 | 0 | 0.1527 | 1 |
| 2011 | 86 | 0.9459 | 55.32626 | 3.48 | 12.8391 | 0.07382 | 0 | 0.1536 | 1 |
| 2012 | 86 | 1.0683 | 58.79157 | 2.17 | 12.9272 | 0.13583 | 0 | 0.143 | 1 |
| 2008 | 87 | 0.8777 | 27.54918 | 2.55 | 12.417 | 0.08354 | 0.2069 | 0.1221 | 1 |
| 2009 | 87 | 0.5359 | 39.11215 | 2.11 | 12.0076 | 0.05384 | 0.3495 | 0.0611 | 1 |
| 2010 | 87 | 0.5737 | 13.98808 | 2.3 | 12.3537 | 0.05219 | 0.1945 | 0.0761 | 1 |
| 2011 | 87 | 0.7161 | 22.47839 | 2.92 | 12.5783 | 0.08121 | 0.1772 | 0.1208 | 1 |
| 2012 | 87 | 0.9167 | 42.17345 | 1.99 | 12.297 | 0.15324 | 0.1595 | 0.0529 | 1 |
| 2008 | 88 | 1.3447 | 25.9167 | 11.6 | 12.0155 | 0 | 0 | 0.1992 | 1 |
| 2009 | 88 | 1.0910 | 19.99817 | 22.2 | 11.6286 | 0 | 0 | 0.1026 | 1 |
| 2010 | 88 | 1.3065 | 27.14827 | 22 | 11.6213 | 0 | 0 | 0.0971 | 1 |
| 2011 | 88 | 1.3068 | 18.93713 | 21.5 | 11.873 | 0 | 0 | 0.1346 | 1 |
| 2012 | 88 | 1.3393 | 27.31438 | 32.9 | 11.6888 | 0 | 0 | 0.1048 | 1 |
| 2008 | 89 | 1.1242 | 63.20727 | 2.66 | 11.7654 | 0.01935 | 0 | 0.0881 | 1 |
| 2009 | 89 | 1.1546 | 71.60716 | 2.91 | 11.7994 | 0.00114 | 0 | 0.2066 | 1 |
| 2010 | 89 | 1.0787 | 77.11083 | 4.76 | 11.8654 | 0.00029 | 0 | 0.0421 | 1 |
| 2011 | 89 | 2.0190 | 94.69979 | 3.89 | 12.0668 | 0 | 0 | 0.0989 | 1 |
| 2012 | 89 | 1.9943 | 81.23085 | 3.11 | 12.3159 | 0 | 0 | 0.1179 | 1 |
| 2008 | 90 | 0.7943 | 35.98746 | 0.37 | 11.445 | 0.62944 | 0 | -0.1029 | 0 |
| 2009 | 90 | 0.6748 | 1.71745 | 0.32 | 11.6395 | 0.58288 | 0.0418 | 0.018 | 0 |
| 2010 | 90 | 1.1223 | 22.43889 | 0.39 | 11.8341 | 0.59909 | 0 | 0.0106 | 0 |
| 2011 | 90 | 1.1546 | 56.53091 | 0.96 | 11.8114 | 0.39324 | 0 | -0.0085 | 0 |
| 2012 | 90 | 0.9475 | 8.398736 | 0.81 | 11.843 | 0.2897 | 0 | -0.0893 | 0 |
| 2008 | 91 | 5.0665 | 57.94003 | 1.76 | 13.4752 | 0 | 0 | 0.1999 | 1 |
| 2009 | 91 | 3.2879 | 51.28276 | 2 | 13.4471 | 0 | 0.0306 | 0.2935 | 1 |
| 2010 | 91 | 3.9459 | 38.03954 | 2.2 | 13.4738 | 0 | 0.0112 | 0.293 | 1 |
| 2011 | 91 | 4.0485 | 17.32186 | 2.4 | 13.6056 | 0 | 0.0061 | 0.3575 | 1 |
| 2012 | 91 | 10.3508 | -5.37955 | 1.91 | 13.6902 | 0 | 0.0031 | 0.4406 | 1 |
| 2008 | 92 | 1.3313 | 17.58307 | 3.01 | 13.1742 | 0.00058 | 0 | 0.1646 | 1 |
| 2009 | 92 | 1.1077 | 24.59791 | 3.98 | 12.7713 | 0.00019 | 0.2687 | 0.0855 | 1 |
| 2010 | 92 | 1.0381 | 18.70305 | 4.26 | 12.9854 | 2.98E-05 | 0 | 0.0793 | 1 |
| 2011 | 92 | 1.0219 | 25.23867 | 4.57 | 13.08 | 0 | 0 | 0.0861 | 1 |
| 2012 | 92 | 1.0492 | 32.97783 | 5.31 | 13.0222 | 0 | 0 | 0.0804 | 1 |
| 2008 | 93 | 0.3738 | 124.8246 | 0.93 | 12.8999 | 0.52569 | 0.0317 | 0.0237 | 0 |
| 2009 | 93 | 0.2592 | 163.8793 | 0.92 | 12.7597 | 0.57669 | 0.0308 | 0.0189 | 0 |
| 2010 | 93 | 0.3739 | 180.0768 | 0.91 | 12.7103 | 0.57305 | 0.0314 | 0.051 | 0 |
| 2011 | 93 | 0.4520 | 150.3802 | 1.1 | 12.916 | 0.55159 | 0.0233 | 0.0808 | 0 |

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|---|---|---|---|---|---|---|---|---|---|
| 2012 | 93 | 0.5054 | 149.4607 | 1.01 | 12.9005 | 0.59938 | 0.0111 | 0.03 | 0 |
| 2008 | 94 | 2.7234 | 91.55977 | 6.85 | 13.8509 | 0.00792 | 0.1377 | 0.1879 | 1 |
| 2009 | 94 | 1.4259 | 135.525 | 6.67 | 13.5352 | 0.02384 | 0.041 | 0 | 1 |
| 2010 | 94 | 1.7969 | 85.03288 | 5.5 | 13.804 | 0.07259 | 0.0532 | 0.1239 | 1 |
| 2011 | 94 | 1.8768 | 53.35931 | 6.09 | 14.1056 | 0.10447 | 0.0457 | 0.146 | 1 |
| 2012 | 94 | 2.1274 | 77.02447 | 5.55 | 14.0253 | 0.1499 | 0.0371 | 0.0843 | 1 |
| 2008 | 95 | 0.9135 | 30.06666 | 1.31 | 12.4991 | 0.2513 | 0.0784 | 0.159 | 1 |
| 2009 | 95 | 0.6117 | 18.61898 | 0.82 | 12.2478 | 0.23819 | 0.0761 | 0.0746 | 0 |
| 2010 | 95 | 0.5088 | 49.20478 | 1.23 | 12.3411 | 0.17456 | 0.0495 | 0.0344 | 1 |
| 2011 | 95 | 0.6202 | 10.60679 | 1.85 | 12.5046 | 0.20089 | 0.0436 | 0.081 | 1 |
| 2012 | 95 | 0.6612 | 19.65453 | 1.56 | 12.5177 | 0.20031 | 0.0427 | 0.0725 | 1 |
| 2008 | 96 | 0.5770 | 119.8155 | 0.65 | 9.69486 | 0.09543 | 0 | 0.0144 | 1 |
| 2009 | 96 | 0.4214 | 57.91545 | 0.48 | 9.44581 | 0.08532 | 0 | 0.0131 | 1 |
| 2010 | 96 | 0.4739 | 160.812 | 6.52 | 9.31991 | 0.06396 | 0 | 0.0578 | 0 |
| 2011 | 96 | 0.5459 | 105.5507 | 34.9 | 9.76864 | 0.00061 | 0 | 0.033 | 0 |
| 2012 | 96 | 0.5160 | 64.83553 | 46.4 | 9.60885 | 0.00011 | 0 | 0.0085 | 0 |
| 2008 | 97 | 1.4089 | 97.73969 | 1.04 | 13.4507 | 0.56441 | 0 | 0.0482 | 1 |
| 2009 | 97 | 1.3667 | 133.6605 | 1.11 | 13.3734 | 0.55514 | 0 | 0.0614 | 1 |
| 2010 | 97 | 0.7897 | 74.80867 | 1.22 | 13.964 | 0.42552 | 0.0059 | 0.2407 | 1 |
| 2011 | 97 | 2.9513 | 129.512 | 1.07 | 14.1389 | 0.48515 | 0.0029 | 0.1741 | 1 |
| 2012 | 97 | 2.7479 | 159.5672 | 1.2 | 14.1893 | 0.54733 | 0.0122 | 0.1422 | 1 |
| 2008 | 98 | 1.4527 | 35.78188 | 1.48 | 12.9701 | 0.04765 | 0 | 0.0937 | 1 |
| 2009 | 98 | 0.9048 | 40.47502 | 1.31 | 12.8297 | 0.04367 | 0.1757 | 0.0693 | 1 |
| 2010 | 98 | 1.0902 | 31.55731 | 2.17 | 13.0684 | 0.01733 | 0 | 0.1129 | 1 |
| 2011 | 98 | 1.2140 | 22.00313 | 4.4 | 13.3922 | 0 | 0 | 0.1608 | 1 |
| 2012 | 98 | 1.2822 | 31.32143 | 5.44 | 13.174 | 0 | 0 | 0.09 | 1 |
| 2008 | 99 | 0.6378 | 0.528147 | 0.27 | 11.8316 | 0.23949 | 0.0214 | 0.0847 | 1 |
| 2009 | 99 | 0.4401 | 9.493442 | 0.31 | 11.5432 | 0.27051 | 0.3891 | 0.0472 | 1 |
| 2010 | 99 | 0.5761 | 3.761398 | 0.19 | 11.7867 | 0.29092 | 0.0194 | 0.0614 | 1 |
| 2011 | 99 | 0.5472 | -9.7265 | 0.17 | 12.0244 | 0.29739 | 0.0181 | 0.0671 | 1 |
| 2012 | 99 | 0.6615 | 0.389647 | 0.26 | 12.2891 | 0.32681 | 0.0171 | 0.025 | 0 |
| 2008 | 100 | 0.5991 | 46.76137 | 0.74 | 13.019 | 0.58127 | 0 | 0.0004 | 0 |
| 2009 | 100 | 0.3739 | 39.88939 | 0.65 | 13.1248 | 0.51492 | 0.0107 | 0.044 | 0 |
| 2010 | 100 | 0.3462 | 45.46361 | 0.68 | 13.3241 | 0.52777 | 0.0104 | 0.0849 | 1 |
| 2011 | 100 | 0.5602 | 40.73141 | 0.7 | 13.4136 | 0.43722 | 0.0081 | 0.0845 | 1 |
| 2012 | 100 | 0.9892 | 36.08586 | 0.57 | 13.4316 | 0.54632 | 0.0058 | -0.0193 | 0 |
| 2008 | 101 | 0.6203 | 64.98232 | 2.31 | 12.3029 | 0 | 0.079 | 0.1274 | 1 |
| 2009 | 101 | 0.6524 | 69.09524 | 2.73 | 12.2709 | 0 | 0.0709 | 0.1918 | 1 |
| 2010 | 101 | 1.2286 | 68.45614 | 2.93 | 12.2972 | 0 | 0.0459 | 0.1688 | 1 |
| 2011 | 101 | 1.4682 | 58.53073 | 2.78 | 12.3894 | 0 | 0 | 0.1356 | 1 |
| 2012 | 101 | 1.5660 | 56.24539 | 3.15 | 12.4204 | 0 | 0 | 0.2164 | 1 |
| 2008 | 102 | 1.4628 | 86.4172 | 0.79 | 11.2929 | 0.38357 | 0 | 0.0285 | 0 |

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|---|---|---|---|---|---|---|---|---|---|
| 2009 | 102 | 0.7914 | 97.0232 | 0.98 | 11.1859 | 0.32248 | 0 | 0.0557 | 0 |
| 2010 | 102 | 1.0506 | 97.48689 | 0.99 | 11.2518 | 0.33077 | 0 | 0.0314 | 0 |
| 2011 | 102 | 1.5965 | 95.59571 | 0.91 | 11.2044 | 0.37351 | 0 | -0.0095 | 0 |
| 2012 | 102 | 1.6215 | 106.5167 | 0.89 | 11.1042 | 0.38704 | 0 | 0.0126 | 0 |
| 2008 | 103 | 3.0933 | 28.69428 | 2.45 | 13.0774 | 0.0701 | 0.4184 | 0.1937 | 1 |
| 2009 | 103 | 1.8513 | 24.87192 | 1.3 | 13.1054 | 0.03367 | 0 | 0.1559 | 1 |
| 2010 | 103 | 1.7039 | 57.49527 | 7.21 | 12.9159 | 0 | 0 | 0.0882 | 1 |
| 2011 | 103 | 1.7609 | 44.53963 | 6.52 | 13.1349 | 0 | 0 | 0.1283 | 1 |
| 2012 | 103 | 1.9231 | 32.18912 | 5.21 | 13.2886 | 0.11864 | 0 | 0.1176 | 1 |
| 2008 | 104 | 5.4804 | 94.93915 | 3.11 | 16.501 | 0.34664 | 0.0299 | 0.1883 | 1 |
| 2009 | 104 | 3.1758 | 72.59227 | 4.7 | 16.4966 | 0.34866 | 0.0323 | 0.1274 | 1 |
| 2010 | 104 | 3.4044 | 75.72573 | 5 | 16.3447 | 0.27584 | 0.0297 | 0.155 | 1 |
| 2011 | 104 | 2.8264 | 86.22007 | 3.37 | 16.5977 | 0.27532 | 0.0261 | 0.146 | 1 |
| 2012 | 104 | 2.7312 | 85.83337 | 4.17 | 16.5654 | 0.35321 | 0.0223 | 0.1051 | 1 |
| 2008 | 105 | 1.0845 | 80.64207 | 2.17 | 11.2282 | 0.02633 | 0.0023 | 0.1379 | 1 |
| 2009 | 105 | 0.9385 | 71.27152 | 2.3 | 11.3809 | 0.0738 | 0.1088 | 0.1663 | 1 |
| 2010 | 105 | 1.5325 | 79.9264 | 2.88 | 11.4316 | 0.05056 | 0 | 0.1553 | 1 |
| 2011 | 105 | 1.3973 | 97.64023 | 3.8 | 11.5524 | 0.03753 | 0 | 0.1435 | 1 |
| 2012 | 105 | 0.9292 | 81.41612 | 3.49 | 11.6103 | 0.02842 | 0 | 0.1219 | 1 |
| 2008 | 106 | 0.8942 | 62.95103 | 4.05 | 14.1381 | 0.03676 | 0.0002 | 0.075 | 0 |
| 2009 | 106 | 0.6230 | 96.73845 | 5.15 | 13.7247 | 0.0165 | 0.0005 | 0.0861 | 0 |
| 2010 | 106 | 0.7371 | 89.09893 | 10.9 | 13.8342 | 0.00704 | 0.0004 | 0.1724 | 1 |
| 2011 | 106 | 0.8612 | 75.30751 | 9.88 | 14.0426 | 0.01166 | 0.0003 | 0.0477 | 1 |
| 2012 | 106 | 0.7913 | 75.38877 | 10.8 | 13.8699 | 0.00678 | 0.0002 | 0.0476 | 0 |
| 2008 | 107 | 0.7996 | 119.0972 | 1.51 | 11.1096 | 0.13796 | 0.0198 | 0.0186 | 0 |
| 2009 | 107 | 0.6540 | 115.0911 | 1.32 | 11.0068 | 0.18627 | 0.015 | 0.0305 | 0 |
| 2010 | 107 | 0.4280 | 80.93613 | 1.13 | 11.1823 | 0.20117 | 0.0138 | 0.0341 | 1 |
| 2011 | 107 | 0.4088 | 93.22401 | 1.01 | 11.3162 | 0.27336 | 0.0119 | 0.0443 | 1 |
| 2012 | 107 | 0.2864 | 47.16633 | 0.61 | 11.3912 | 0.26845 | 0.0108 | 0.0417 | 0 |
| 2008 | 108 | 1.9143 | 16.04019 | 3.47 | 13.0602 | 0.0593 | 0.0031 | 0.1933 | 1 |
| 2009 | 108 | 1.5003 | 23.91753 | 3.63 | 13.1364 | 0.08639 | 0.0027 | 0.1985 | 1 |
| 2010 | 108 | 1.4853 | 25.26763 | 3.7 | 13.0204 | 0.07631 | 0.0053 | 0.1367 | 1 |
| 2011 | 108 | 1.5294 | 19.52146 | 3.18 | 13.2418 | 0.05775 | 0.0075 | 0.1508 | 1 |
| 2012 | 108 | 1.6110 | 20.53568 | 4.32 | 13.552 | 0.05512 | ###### | 0.2356 | 1 |
| 2008 | 109 | 0.4293 | 10.65127 | 20.2 | 9.24465 | 0 | 0 | 0.0231 | 1 |
| 2009 | 109 | 0.3383 | 40.29781 | 27.4 | 8.81967 | 0 | 0 | 0.003 | 1 |
| 2010 | 109 | 0.3498 | 55.40484 | 28.5 | 8.76561 | 0 | 0 | 0.0033 | 1 |
| 2011 | 109 | 0.4086 | 15.80045 | 25.5 | 8.93287 | 0 | 0 | 0.0148 | 1 |
| 2012 | 109 | 0.4219 | 16.2041 | 24.9 | 8.87668 | 0 | 0 | 0.0071 | 1 |
| 2008 | 110 | 1.2766 | 91.38551 | 1.28 | 11.8402 | 0.26785 | 0.0226 | 0.1141 | 0 |
| 2009 | 110 | 0.8914 | 149.7177 | 1.75 | 11.6965 | 0.16609 | 0.1688 | 0.0945 | 0 |
| 2010 | 110 | 0.7484 | 134.7299 | 2.06 | 11.9622 | 0.00879 | 0.0239 | 0.1403 | 1 |

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|---|---|---|---|---|---|---|---|---|---|
| 2011 | 110 | 0.5848 | 95.96459 | 2.14 | 12.4065 | 0.01527 | 0.0406 | 0.095 | 1 |
| 2012 | 110 | 0.9700 | 140.4391 | 2.16 | 12.4384 | 0.03182 | 0.0395 | 0.0526 | 0 |
| 2008 | 111 | 3.2223 | 85.89107 | 2.07 | 15.8767 | 0.20931 | 0.0345 | 0.1726 | 1 |
| 2009 | 111 | 2.1241 | 83.87107 | 2.56 | 15.7114 | 0.20364 | 0.0382 | 0.1072 | 1 |
| 2010 | 111 | 3.0033 | 88.4613 | 2.67 | 15.8292 | 0.18449 | 0.0352 | 0.1535 | 1 |
| 2011 | 111 | 3.1500 | 90.7894 | 1.91 | 16.1898 | 0.191 | 0.0309 | 0.1931 | 1 |
| 2012 | 111 | 3.6321 | 71.71563 | 3.05 | 16.1248 | 0.2188 | 0.027 | 0.1282 | 1 |
| 2008 | 112 | 0.7510 | 82.04758 | 2.38 | 11.4691 | 0.30165 | 0 | 0.075 | 0 |
| 2009 | 112 | 0.6051 | 58.03512 | 1.5 | 11.6672 | 0.26258 | 0 | -0.0617 | 0 |
| 2010 | 112 | 0.8122 | 39.67502 | 1.06 | 11.3657 | 0.22687 | 0 | -0.0577 | 0 |
| 2011 | 112 | 0.9307 | 47.91423 | 0.9 | 11.0534 | 0.12183 | 0 | -0.0129 | 0 |
| 2012 | 112 | 1.3191 | 54.43316 | 1.07 | 10.893 | 0.03743 | 0 | -0.1784 | 0 |
| 2008 | 113 | 1.5953 | 44.79233 | 0.97 | 15.0545 | 0.36054 | 0 | 0.1286 | 0 |
| 2009 | 113 | 0.6387 | 87.46837 | 0.67 | 14.2657 | 0.38277 | 0 | -0.0356 | 1 |
| 2010 | 113 | 0.5997 | 49.96977 | 0.45 | 14.0372 | 0.37621 | 0 | 0.0183 | 1 |
| 2011 | 113 | 0.5722 | 71.24592 | 0.7 | 14.0395 | 0.33584 | 0 | 0.0821 | 1 |
| 2012 | 113 | 0.5475 | 67.88595 | 0.64 | 14.0776 | 0.329 | 0 | 0.0318 | 1 |
| 2008 | 114 | 0.4908 | 50.22151 | 0.9 | 12.6683 | 0.36386 | 0.011 | 0.0456 | 0 |
| 2009 | 114 | 0.2814 | 45.92253 | 0.86 | 12.7672 | 0.35162 | 0.0099 | 0.0641 | 1 |
| 2010 | 114 | 0.4558 | 39.47405 | 0.92 | 12.8707 | 0.32462 | 0.0091 | 0.0702 | 1 |
| 2011 | 114 | 0.6444 | 42.78153 | 0.96 | 12.9554 | 0.25264 | 0.009 | 0.0778 | 1 |
| 2012 | 114 | 0.6790 | 48.8745 | 0.97 | 13.1064 | 0.2705 | 0.0099 | 0.0631 | 1 |
| 2008 | 115 | 0.5835 | 42.93962 | 0.58 | 11.8362 | 0.51256 | 0.0113 | 0.0486 | 0 |
| 2009 | 115 | 0.3149 | 95.62777 | 0.62 | 12.1243 | 0.4199 | 0.0283 | 0.0568 | 1 |
| 2010 | 115 | 0.5529 | 32.78619 | 0.72 | 12.3169 | 0.38478 | 0.0253 | 0.0472 | 1 |
| 2011 | 115 | 0.4547 | 54.84496 | 0.94 | 12.3577 | 0.36186 | 0.021 | 0.0504 | 0 |
| 2012 | 115 | 0.3292 | 78.26941 | 0.58 | 12.4432 | 0.38419 | 0.0206 | 0.0466 | 0 |
| 2008 | 116 | 0.4646 | 97.02391 | 1.58 | 11.5918 | 0.17 | 0 | 0.0704 | 1 |
| 2009 | 116 | 0.4555 | 68.47799 | 2.47 | 11.8021 | 0.09952 | 0 | 0.1087 | 1 |
| 2010 | 116 | 0.5745 | 72.31182 | 2.43 | 11.7862 | 0.1666 | 0 | 0.1378 | 1 |
| 2011 | 116 | 0.6437 | 79.54702 | 2.33 | 11.9217 | 0.19777 | 0 | 0.137 | 1 |
| 2012 | 116 | 0.6785 | 80.75552 | 2.63 | 11.965 | 0.14438 | 0 | 0.1227 | 1 |
| 2008 | 117 | 0.8255 | 137.6445 | 1.6 | 13.9968 | 0.35209 | 0.0042 | 0.1209 | 1 |
| 2009 | 117 | 0.7340 | 122.6942 | 1.81 | 13.9987 | 0.28906 | 0.0033 | 0.1286 | 1 |
| 2010 | 117 | 0.9088 | 120.4246 | 1.61 | 14.257 | 0.38076 | 0.0019 | 0.1346 | 1 |
| 2011 | 117 | 1.1741 | 104.9177 | 1.45 | 14.467 | 0.38944 | 0.0014 | 0.1001 | 1 |
| 2012 | 117 | 1.6254 | 113.3171 | 1.43 | 14.5228 | 0.42537 | 0.001 | 0.0481 | 0 |
| 2008 | 118 | 0.5947 | 33.85655 | 12.9 | 9.75051 | 0 | 0 | 0.0644 | 0 |
| 2009 | 118 | 0.4011 | 121.7854 | 13.6 | 9.23474 | 0 | 0.2055 | 0.0452 | 0 |

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|---|---|---|---|---|---|---|---|---|---|
| 2010 | 118 | 0.4617 | 81.54502 | 13.2 | 9.44288 | 0 | 0 | 0.0656 | 0 |
| 2011 | 118 | 0.5505 | 10.97474 | 13.5 | 9.00147 | 0 | 0 | 0.0136 | 0 |
| 2012 | 118 | 0.5736 | 0 | 13.6 | 0 | 0 | 0 | -0.0212 | 0 |
| 2008 | 119 | 0.6503 | 36.29381 | 1.39 | 10.2577 | 0.09708 | 0.0724 | 0.0574 | 1 |
| 2009 | 119 | 0.4188 | 38.28167 | 1.14 | 10.0559 | 0.09999 | 0.138 | 0.0383 | 1 |
| 2010 | 119 | 0.4518 | 33.90039 | 1 | 10.216 | 0.09189 | 0.0607 | 0.0485 | 1 |
| 2011 | 119 | 0.6946 | 30.59446 | 0.7 | 10.4253 | 0.07576 | 0.0549 | 0.0607 | 1 |
| 2012 | 119 | 0.9008 | 57.82513 | 0.66 | 10.2431 | 0.12353 | 0.0495 | 0.033 | 1 |
| 2008 | 120 | 1.0477 | 30.31975 | 19.9 | 11.566 | 0 | 0 | 0.0827 | 1 |
| 2009 | 120 | 0.8868 | 32.79369 | 18.3 | 11.2814 | 0 | 0 | 0.1001 | 1 |
| 2010 | 120 | 1.0082 | 29.44459 | 17.2 | 11.3692 | 0 | 0 | 0.1001 | 1 |
| 2011 | 120 | 0.9860 | 22.43896 | 17.9 | 11.6366 | 0 | 0 | 0.1099 | 1 |
| 2012 | 120 | 1.1613 | 27.86178 | 15.3 | 11.3545 | 0 | 0 | 0.0263 | 1 |
| 2008 | 121 | 13.2720 | 49.03087 | 0.86 | 15.1706 | 0.06559 | 0.0368 | 0.2805 | 1 |
| 2009 | 121 | 12.0712 | 22.44893 | 1.08 | 15.1357 | 0.22547 | 0.0358 | 0.2703 | 1 |
| 2010 | 121 | 13.5035 | 24.98864 | 1.09 | 15.2084 | 0.23388 | 0.0345 | 0.2757 | 1 |
| 2011 | 121 | 17.4560 | 29.97763 | 1.11 | 15.3633 | 0.17158 | 0.0306 | 0.291 | 1 |
| 2012 | 121 | 17.4504 | 9.239587 | 0.9 | 15.332 | 0.05307 | 0.0326 | 0.3512 | 1 |
| 2008 | 122 | 1.3692 | 11.98239 | 0.7 | 12.9036 | 0.12834 | 0.0137 | 0.1907 | 1 |
| 2009 | 122 | 1.0063 | 17.48397 | 0.77 | 12.6592 | 0.11124 | 0.2351 | 0.1368 | 1 |
| 2010 | 122 | 0.8742 | 15.34126 | 0.76 | 12.89 | 0.1385 | 0.0106 | 0.1317 | 1 |
| 2011 | 122 | 0.8975 | 29.99462 | 1.43 | 13.0365 | 0.17161 | 0.0093 | 0.1194 | 1 |
| 2012 | 122 | 1.0670 | 50.61139 | 0.81 | 12.8996 | 0.36555 | 0.049 | 0.0462 | 1 |
| 2008 | 123 | 0.3479 | 100.7857 | 1.75 | 13.4549 | 0.31859 | 0.1538 | 0.0014 | 0 |
| 2009 | 123 | 0.2671 | 102.022 | 1.78 | 13.2414 | 0.29295 | 0.1837 | 0.0284 | 0 |
| 2010 | 123 | 0.2704 | 104.6354 | 1.5 | 12.9365 | 0.2729 | 0.1813 | 0.0102 | 0 |
| 2011 | 123 | 0.2570 | 165.1171 | 1.8 | 12.4053 | 0.24488 | 0.1855 | 0.0382 | 0 |
| 2012 | 123 | 0.2531 | 138.5707 | 1.79 | 12.4954 | 0.20239 | 0.1932 | 0.0529 | 1 |
| 2008 | 124 | 0.6440 | 82.86052 | 2.49 | 11.7312 | 0.10361 | 0 | 0.0457 | 1 |
| 2009 | 124 | 0.5086 | 73.36919 | 3.72 | 11.6822 | 0.09347 | 0 | 0.081 | 1 |
| 2010 | 124 | 0.7935 | 81.50438 | 3.79 | 11.7417 | 0.06267 | 0 | 0.1041 | 1 |
| 2011 | 124 | 0.8444 | 71.20061 | 2.93 | 11.9137 | 0.05693 | 0 | 0.0781 | 1 |
| 2012 | 124 | 0.7307 | 74.6565 | 2.64 | 12.1821 | 0.06622 | 0 | 0.1066 | 1 |
| 2008 | 125 | 1.2015 | 163.5379 | 1.38 | 14.7326 | 0.44561 | 0.0001 | -0.0618 | 0 |
| 2009 | 125 | 0.6287 | 141.7311 | 1.21 | 14.9972 | 0.36418 | 0.0048 | 0.1045 | 0 |
| 2010 | 125 | 0.8708 | 158.2359 | 1.84 | 14.9702 | 0.39534 | ###### | 0.1027 | 0 |
| 2011 | 125 | 1.2356 | 163.2266 | 2.29 | 15.077 | 0.47628 | ###### | 0.0956 | 0 |
| 2012 | 125 | 1.3094 | 153.7908 | 2.27 | 15.1054 | 0.47103 | 0.0139 | 0.0699 | 0 |
| 2008 | 126 | 0.4567 | 113.006 | 1.49 | 11.7357 | 0.38293 | 0.11 | -0.0363 | 0 |
| 2009 | 126 | 0.2777 | 168.6356 | 2.5 | 11.1972 | 0.10447 | 0.162 | 0.0052 | 0 |

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| 2010 | 126 | 0.3375 | 133.0233 | 2.54 | 11.2718 | 0.10503 | 0.1751 | 0.0046 | 0 |
| 2011 | 126 | 0.3021 | 152.9818 | 3.76 | 11.2982 | 0.04402 | 0.1887 | 0.0161 | 0 |
| 2012 | 126 | 0.2331 | 147.8359 | 5.85 | 11.3576 | 0.04298 | 0.1859 | 0.0294 | 0 |
| | | | | | | | | - | |
| 2008 | 127 | 0.7418 | 12.5431 | 0.46 | 11.2564 | 0.2036 | 0 | 0.0304 | 0 |
| 2009 | 127 | 0.5913 | -8.30977 | 0.14 | 10.8395 | 0.19137 | 0 | 0.0109 | 0 |
| 2010 | 127 | 0.5648 | -70.7189 | 0.22 | 10.5781 | 0.23752 | 0 | 0.0112 | 0 |
| 2011 | 127 | 0.5695 | -57.3092 | 0.21 | 10.8268 | 0.24837 | 0 | 0.0261 | 0 |
| 2012 | 127 | 0.6054 | -62.674 | 0.15 | 10.6758 | 0.26371 | 0 | 0.0062 | 0 |
| 2008 | 128 | 1.0563 | 103.6631 | 2.53 | 15.0574 | 0.02886 | 0.0057 | 0.0355 | 1 |
| 2009 | 128 | 0.8500 | 114.6277 | 3.52 | 14.5114 | 0.008 | 0.0118 | 0.0147 | 1 |
| 2010 | 128 | 1.5986 | 98.2263 | 4.86 | 14.6371 | 0.00821 | 0.006 | 0.0255 | 1 |
| 2011 | 128 | 1.4096 | 118.7805 | 4.23 | 14.8127 | 0.01698 | 0.0058 | 0.016 | 1 |
| 2012 | 128 | 1.3822 | 114.2846 | 3.34 | 14.9201 | 0.024 | 0.0049 | 0.0134 | 1 |
| 2008 | 129 | 0.3580 | 75.53012 | 1.22 | 13.6155 | 0.41894 | 0.0572 | 0.043 | 1 |
| 2009 | 129 | 0.3063 | 70.42242 | 1.52 | 13.6617 | 0.40848 | 0.0788 | 0.0649 | 1 |
| | | | | | | | | - | |
| 2010 | 129 | 1.3645 | 71.32508 | 0.99 | 13.5786 | 0.42718 | 0.0607 | 0.0782 | 1 |
| | | | | | | | | - | |
| 2011 | 129 | 0.7500 | 0 | 37 | 0 | 0.00013 | 0 | 0.0142 | 0 |
| 2012 | 129 | 1.1308 | 1.89857 | 38.7 | 8.25453 | 0 | 0 | 0.0117 | 0 |
| 2008 | 130 | 0.2636 | 67.7092 | 0.7 | 12.7496 | 0.35119 | 0.017 | 0.0279 | 0 |
| 2009 | 130 | 0.1965 | 87.19467 | 0.75 | 12.5154 | 0.3778 | 0.0179 | 0.0201 | 0 |
| 2010 | 130 | 0.1962 | 108.3156 | 0.89 | 12.478 | 0.38252 | 0.0194 | 0.0486 | 0 |
| 2011 | 130 | 0.2207 | 82.3656 | 0.91 | 12.4851 | 0.34959 | 0.0215 | 0.0471 | 1 |
| 2012 | 130 | 0.1470 | 92.40752 | 0.8 | 12.2757 | 0.26028 | 0.0162 | 0.0153 | 0 |
| 2008 | 131 | 2.7175 | 68.92944 | 1.14 | 14.0831 | 0.38326 | 0.0048 | 0.1334 | 1 |
| 2009 | 131 | 1.9886 | 68.98447 | 1.3 | 14.1505 | 0.39799 | 0.0058 | 0.133 | 1 |
| 2010 | 131 | 2.6782 | 70.01052 | 1.55 | 14.2051 | 0.37322 | 0.0058 | 0.1351 | 1 |
| 2011 | 131 | 3.6154 | 72.32627 | 1.47 | 14.3905 | 0.33882 | 0.0059 | 0.1194 | 1 |
| 2012 | 131 | 3.2373 | 69.10069 | 1.29 | 14.4816 | 0.35718 | 0.0045 | 0.1117 | 1 |
| 2008 | 132 | 0.3576 | 190.3972 | 2.84 | 12.0678 | 0.21026 | 0.0671 | 0.0306 | 1 |
| 2009 | 132 | 0.3837 | 219.6152 | 3 | 11.9995 | 0.20347 | 0.065 | 0.0298 | 1 |
| | | | | | | | | - | |
| 2010 | 132 | 0.3054 | 260.9939 | 2.38 | 11.8174 | 0.23657 | 0.064 | 0.0084 | 0 |
| 2011 | 132 | 0.3146 | 218.0931 | 2.17 | 11.8624 | 0.2405 | 0.0655 | 0.0005 | 0 |
| 2012 | 132 | 0.2155 | 215.7423 | 2.28 | 11.8416 | 0.19722 | 0.0532 | 0.0182 | 0 |
| 2008 | 133 | 3.5014 | 22.02369 | 1.78 | 12.2643 | 0.5461 | 0.0129 | 0.2375 | 1 |
| 2009 | 133 | 1.7803 | 9.292613 | 1.32 | 11.9309 | 0.55122 | 0.0119 | 0.0992 | 1 |
| 2010 | 133 | 0.4485 | -9.84701 | 0.11 | 12.2936 | 0.32206 | 0.0598 | 0.0514 | 1 |
| 2011 | 133 | 0.3776 | -11.0657 | 1.06 | 12.7927 | 0.23698 | 0.0481 | 0.0707 | 1 |
| 2012 | 133 | 1.6753 | 13.42583 | 0.42 | 12.6567 | 0.23271 | 0.0562 | 0.0266 | 1 |
| 2008 | 134 | 0.9761 | 25.8645 | 7.64 | 10.1786 | 0 | 0 | 0.0906 | 1 |

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|---|---|---|---|---|---|---|---|---|---|
| 2009 | 134 | 0.7564 | 22.14087 | 8.68 | 9.99616 | 0 | 0 | 0.0959 | 1 |
| 2010 | 134 | 1.0082 | 32.5184 | 8.87 | 10.082 | 0 | 0 | 0.0853 | 1 |
| 2011 | 134 | 1.1027 | 46.36009 | 6.26 | 10.2285 | 0 | 0 | 0.1031 | 1 |
| 2012 | 134 | 0.6724 | 69.17092 | 5.78 | 10.1294 | 0 | 0 | 0.0499 | 1 |
| 2008 | 135 | 1.6060 | 34.95994 | 2.18 | 13.435 | 0.19933 | 0.0012 | 0.1718 | 1 |
| 2009 | 135 | 1.1862 | 13.59859 | 2.43 | 13.1868 | 0.20627 | 0.0016 | 0.0996 | 1 |
| 2010 | 135 | 1.2720 | 28.86985 | 2.43 | 13.4983 | 0.18365 | 0.0031 | 0.1362 | 1 |
| 2011 | 135 | 1.2442 | 22.30007 | 2.86 | 13.9699 | 0.20476 | 0.0025 | 0.1802 | 1 |
| 2012 | 135 | 2.1960 | 46.18713 | 1.96 | 14.0893 | 0.26169 | 0.0021 | 0.0923 | 1 |
| 2008 | 136 | 2.1463 | 55.16506 | 1.64 | 12.477 | 0.08324 | 0 | 0.1164 | 1 |
| 2009 | 136 | 1.0366 | 57.38229 | 2.76 | 12.5965 | 0.10238 | 0.0536 | 0.0821 | 1 |
| 2010 | 136 | 1.1749 | 40.11315 | 3.26 | 12.7391 | 0.12985 | 0 | 0.081 | 1 |
| 2011 | 136 | 1.1465 | 27.58645 | 2.42 | 13.0802 | 0.10717 | 0 | 0.1418 | 1 |
| 2012 | 136 | 1.5166 | 18.8392 | 2.14 | 12.9719 | 0.09269 | 0 | 0.0937 | 1 |
| 2008 | 137 | 0.8959 | 50.26258 | 0.73 | 10.9761 | 0.27718 | 0.1014 | -0.0158 | 0 |
| 2009 | 137 | 0.4235 | 38.65322 | 0.72 | 11.0464 | 0.26142 | 0.2387 | 0.015 | 0 |
| 2010 | 137 | 0.7524 | 31.37987 | 0.59 | 10.9915 | 0.26 | 0.1009 | 0.0349 | 0 |
| 2011 | 137 | 0.6313 | -9.81544 | 0.78 | 10.209 | 0.21615 | 0.1023 | 0.0446 | 0 |
| 2012 | 137 | 1.8185 | -14.9198 | 0.32 | 10.0537 | 0.21353 | 0.114 | 0.0243 | 0 |
| 2008 | 138 | 0.6808 | -39.3412 | 1.18 | 12.8502 | 0.00723 | 0.0012 | 0.1638 | 1 |
| 2009 | 138 | 0.5655 | 2.749654 | 1.4 | 12.7279 | 0.00714 | 0.204 | 0.0929 | 1 |
| 2010 | 138 | 0.6084 | -9.80909 | 1.65 | 12.9491 | 0.00513 | 0.0016 | 0.1394 | 1 |
| 2011 | 138 | 0.5810 | -5.85252 | 1.86 | 13.1288 | 0.00103 | 0.0059 | 0.1486 | 1 |
| 2012 | 138 | 0.9558 | 1.316462 | 2.34 | 13.0286 | 0.02007 | 0.0066 | 0.0984 | 1 |
| 2008 | 139 | 0.4780 | 52.11232 | 1.53 | 11.2715 | 0.00372 | 0.0281 | -0.0091 | 0 |
| 2009 | 139 | 0.3362 | 247.7211 | 4.39 | 11.6579 | 0.07519 | 0.0177 | 0.0394 | 0 |
| 2010 | 139 | 0.4179 | 481.8839 | 2.52 | 11.3352 | 0.19848 | 0.0137 | 0.0111 | 0 |
| 2011 | 139 | 0.5445 | 210.4629 | 3.39 | 12.0246 | 0.16781 | 0.0151 | 0.0845 | 0 |
| 2012 | 139 | 0.5071 | 72.11818 | 2.08 | 12.2318 | 0.48496 | 0.0196 | 0.0739 | 0 |
| 2008 | 140 | 1.6389 | 96.17032 | 0.92 | 12.4024 | 0.02044 | 0 | 0.1266 | 1 |
| 2009 | 140 | 1.7936 | 74.8737 | 1.41 | 12.626 | 0.10314 | 0.3934 | 0.0837 | 1 |
| 2010 | 140 | 1.4913 | 39.10486 | 1.59 | 12.8103 | 0.14987 | 0 | 0.1388 | 1 |
| 2011 | 140 | 1.7425 | 70.04783 | 1.65 | 12.9827 | 0.12032 | 0 | 0.1535 | 1 |
| 2012 | 140 | 1.3136 | 78.18085 | 1.11 | 12.8369 | 0.19413 | 0.0055 | 0.0776 | 1 |
| 2008 | 141 | 1.4257 | 130.1421 | 1.71 | 11.9333 | 0.32873 | 0 | 0.1099 | 1 |
| 2009 | 141 | 0.7800 | 158.513 | 3.1 | 12.0928 | 0.16901 | 0 | 0.1339 | 1 |
| 2010 | 141 | 3.6980 | 159.3308 | 2.31 | 12.425 | 0.23486 | 0 | 0.0808 | 1 |
| 2011 | 141 | 3.1912 | 154.5431 | 2.87 | 12.5017 | 0.18618 | 0 | 0.0661 | 1 |
| 2012 | 141 | 2.1355 | 168.398 | 2.39 | 12.6327 | 0.22879 | 0 | 0.0794 | 1 |
| 2008 | 142 | 1.8837 | 118.483 | 1.07 | 13.9198 | 0.32992 | 0.0282 | 0.0559 | 1 |
| 2009 | 142 | 0.9487 | 123.3183 | 1 | 13.7956 | 0.35016 | 0.1385 | 0.0592 | 1 |

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|---|---|---|---|---|---|---|---|---|---|
| 2010 | 142 | 1.1168 | 118.6271 | 0.68 | 13.7195 | 0.38709 | 0.0272 | 0.0612 | 1 |
| 2011 | 142 | 1.3449 | 82.33235 | 0.75 | 13.9414 | 0.36922 | 0.0251 | 0.0835 | 1 |
| 2012 | 142 | 2.3519 | 128.7771 | 0.8 | 13.799 | 0.43623 | 0.0225 | 0.0503 | 1 |
| 2008 | 143 | 1.1950 | 48.45179 | 17.2 | 12.3113 | 0 | 0.0195 | 0.1157 | 1 |
| 2009 | 143 | 0.9752 | 37.05567 | 21.4 | 12.1812 | 0 | 0.0193 | 0.0904 | 1 |
| 2010 | 143 | 1.1881 | 39.56329 | 7.57 | 12.0925 | 0 | 0.0187 | 0.0776 | 1 |
| 2011 | 143 | 1.3748 | 76.37472 | 8.21 | 12.2342 | 0 | 0.0166 | 0.0901 | 1 |
| 2012 | 143 | 1.4645 | 107.1092 | 8.57 | 12.3518 | 0 | 0.016 | 0.091 | 1 |
| 2008 | 144 | 2.0333 | 76.00731 | 4.17 | 13.846 | 1.15E-05 | 0 | 0.2418 | 1 |
| 2009 | 144 | 1.3467 | 79.35684 | 5.02 | 13.613 | 6.72E-05 | 0.2091 | 0.2036 | 1 |
| 2010 | 144 | 1.6513 | 66.77962 | 4.67 | 13.7842 | 0.00074 | 0 | 0.1742 | 1 |
| 2011 | 144 | 1.8869 | 67.30199 | 7.68 | 14.1508 | 0.00018 | 0 | 0.2234 | 1 |
| 2012 | 144 | 2.4192 | 72.65986 | 8.4 | 13.9839 | 3.37E-05 | 0 | 0.1916 | 1 |
| 2008 | 145 | 0.2974 | 143.7239 | 0.5 | 10.3897 | 0.15498 | 0 | 0.0244 | 1 |
| 2009 | 145 | 0.1572 | 181.1601 | 0.54 | 9.87699 | 0.15825 | 0 | -0.0756 | 0 |
| 2010 | 145 | 0.2792 | 170.7601 | 0.51 | 9.88104 | 0.15456 | 0 | -0.0149 | 0 |
| 2011 | 145 | 0.2809 | 170.9994 | 0.67 | 9.93678 | 0.12902 | 0 | 0.0054 | 0 |
| 2012 | 145 | 0.5879 | 221.0629 | 0.63 | 9.60898 | 0.20671 | 0 | -0.7482 | 0 |
| 2008 | 146 | 0.3600 | 75.22719 | 0.94 | 13.4504 | 0.32664 | 0.0087 | 0.0685 | 1 |
| 2009 | 146 | 0.3109 | 83.49838 | 1 | 13.4632 | 0.33355 | 0.0944 | 0.0619 | 1 |
| 2010 | 146 | 0.5524 | 88.73296 | 1.02 | 13.5381 | 0.31689 | 0.0029 | 0.0627 | 1 |
| 2011 | 146 | 0.6706 | 92.52547 | 1.07 | 13.5511 | 0.29028 | 0.0029 | 0.0482 | 1 |
| 2012 | 146 | 0.5259 | 61.56974 | 1.12 | 13.4585 | 0.22473 | 0.003 | 0.0585 | 1 |
| 2008 | 147 | 3.5537 | 115.7144 | 1.01 | 13.5687 | 0.3377 | 0.1564 | 0.1389 | 1 |
| 2009 | 147 | 1.2029 | 181.0967 | 1.15 | 13.5198 | 0.29082 | 0.2126 | 0.1387 | 1 |
| 2010 | 147 | 1.8071 | 85.89628 | 1.82 | 14.2516 | 0.25262 | 0.1753 | 0.1477 | 1 |
| 2011 | 147 | 2.0013 | 101.6887 | 1.69 | 14.2993 | 0.213 | 0.1567 | 0.1309 | 1 |
| 2012 | 147 | 1.7504 | 93.19507 | 2.1 | 14.3449 | 0.26564 | 0.146 | 0.1177 | 1 |
| 2008 | 148 | 0.4849 | 159.0847 | 3.78 | 10.1088 | 0 | 0 | 0.0212 | 1 |
| 2009 | 148 | 0.3886 | 164.1084 | 4.06 | 9.91507 | 0 | 0 | 0.026 | 1 |
| 2010 | 148 | 0.4213 | 103.4783 | 3.73 | 10.0596 | 0 | 0.0007 | 0.0368 | 1 |
| 2011 | 148 | 0.4574 | 123.4784 | 3.14 | 10.1654 | 0 | 0.0007 | 0.07 | 1 |
| 2012 | 148 | 0.5689 | 130.9351 | 3.6 | 10.1791 | 0 | 0.0007 | 0.075 | 1 |
| 2008 | 149 | 2.1100 | 147.8025 | 6.03 | 13.6304 | 0.16526 | 0.0301 | 0.1248 | 1 |
| 2009 | 149 | 1.9195 | 91.04228 | 2.51 | 13.7891 | 0.16339 | 0.052 | 0.1189 | 1 |
| 2010 | 149 | 2.3876 | 128.7164 | 3.01 | 13.8754 | 0.06979 | 0.0401 | 0.1996 | 1 |
| 2011 | 149 | 2.3558 | 107.7717 | 4.27 | 13.881 | 0.16564 | 0.062 | 0.1666 | 1 |
| 2012 | 149 | 2.0743 | 108.5472 | 3.51 | 13.8924 | 0.15621 | 0.0721 | 0.1623 | 1 |
| 2008 | 150 | 0.3707 | 119.9035 | 2.24 | 12.8302 | 0.2842 | 0.0136 | 0.0261 | 1 |
| 2009 | 150 | 0.2765 | 131.8179 | 2.48 | 12.7618 | 0.2622 | 0.0084 | 0.0214 | 0 |

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|---|---|---|---|---|---|---|---|---|---|
| 2010 | 150 | 0.3284 | 167.9248 | 1.73 | 12.7321 | 0.26998 | 0.0044 | 0.0158 | 0 |
| 2011 | 150 | 0.3005 | 114.6044 | 1.73 | 12.8119 | 0.26752 | 0.0033 | 0.0375 | 0 |
| 2012 | 150 | 0.3073 | 138.935 | 1.35 | 12.752 | 0.34037 | 0.004 | -0.0098 | 0 |
| 2008 | 151 | 0.5086 | 198.2321 | 1.66 | 10.3671 | 0.23882 | 0.0623 | -0.0094 | 0 |
| 2009 | 151 | 0.3366 | 300.4265 | 1.57 | 10.1305 | 0.22441 | 0.0586 | 0.0653 | 0 |
| 2010 | 151 | 0.4404 | 409.1575 | 1.72 | 10.2123 | 0.22462 | 0.0534 | 0.068 | 0 |
| 2011 | 151 | 0.4188 | 519.6084 | 1.69 | 9.96576 | 0.1372 | 0.0504 | 0.0561 | 0 |
| 2012 | 151 | 0.7091 | 661.0339 | 1.5 | 9.76371 | 0.12415 | 0.0523 | -0.0665 | 0 |
| 2008 | 152 | 2.5748 | 171.2908 | 3.03 | 12.2473 | 0.11276 | 0.0957 | 0.158 | 1 |
| 2009 | 152 | 1.9088 | 98.17416 | 2.34 | 12.6093 | 0.12255 | 0.0796 | 0.2096 | 1 |
| 2010 | 152 | 1.8114 | 122.7685 | 2.51 | 12.4967 | 0.09813 | 0.0735 | 0.1386 | 1 |
| 2011 | 152 | 1.4443 | 133.6255 | 2.72 | 12.4176 | 0.07395 | 0.0697 | 0.1202 | 1 |
| 2012 | 152 | 1.2196 | 171.8501 | 2.82 | 12.5293 | 0.05093 | 0.0662 | 0.1071 | 1 |
| 2008 | 153 | 0.5600 | 280.8339 | 4.36 | 11.2087 | 0.107 | 0 | 0.0721 | 0 |
| 2009 | 153 | 0.4414 | 309.4049 | 6.22 | 11.047 | 0.08439 | 0.0002 | 0.0612 | 0 |
| 2010 | 153 | 0.6912 | 280.5401 | 5.86 | 11.1542 | 0.15126 | 0 | 0.0576 | 0 |
| 2011 | 153 | 0.5275 | 291.913 | 5.1 | 11.1635 | 0.14726 | 0 | 0.0597 | 1 |
| 2012 | 153 | 0.4717 | 146.855 | 2.42 | 11.7278 | 0.25088 | 0.042 | 0.0277 | 0 |
| 2008 | 154 | 0.4124 | 175.1291 | 1.1 | 11.6119 | 0.44817 | 0.0502 | 0.032 | 0 |
| 2009 | 154 | 0.2745 | 148.937 | 1.12 | 11.5427 | 0.38852 | 0.0568 | 0.0298 | 0 |
| 2010 | 154 | 0.3537 | 167.66 | 1.12 | 11.5979 | 0.42166 | 0.0511 | 0.0224 | 0 |
| 2011 | 154 | 0.3796 | 169.1783 | 1.17 | 11.4767 | 0.38642 | 0.0377 | 0.0097 | 0 |
| 2012 | 154 | 0.4337 | 164.1568 | 1.25 | 11.3107 | 0.31486 | 0 | -0.0597 | 0 |
| 2008 | 155 | 0.9329 | 256.2214 | 13.9 | 10.7666 | 0 | 0.0091 | 0.0855 | 1 |
| 2009 | 155 | 0.4693 | 253.6222 | 18.6 | 10.6561 | 0 | 0.0088 | 0.0889 | 1 |
| 2010 | 155 | 0.8414 | 187.0033 | 11.8 | 10.9469 | 0 | 0.0087 | 0.1299 | 1 |
| 2011 | 155 | 1.0938 | 211.5588 | 14.8 | 10.864 | 0 | 0.009 | 0.1217 | 1 |
| 2012 | 155 | 1.0213 | 165.2394 | 10.4 | 11.0402 | 0 | 0.0083 | 0.1609 | 1 |
| 2008 | 156 | 0.6886 | 92.56141 | 2.29 | 11.5892 | 0.09943 | 0 | 0.0677 | 1 |
| 2009 | 156 | 0.7049 | 156.635 | 1.79 | 11.0808 | 0.24684 | 0 | -0.0353 | 0 |
| 2010 | 156 | 0.5380 | 140.0297 | 1.48 | 11.3874 | 0.28622 | 0 | -0.0165 | 0 |
| 2011 | 156 | 0.4092 | 115.0911 | 1.17 | 11.5813 | 0.31249 | 0 | 0.0215 | 0 |
| 2012 | 156 | 0.3645 | 120.5676 | 1.23 | 11.5442 | 0.32774 | 0 | 0.0355 | 0 |
| 2008 | 157 | 0.5570 | 66.70543 | 6.87 | 11.2089 | 0 | 0 | 0.0924 | 1 |
| 2009 | 157 | 0.4713 | 57.281 | 9.29 | 11.0477 | 0 | 0 | 0.0537 | 1 |
| 2010 | 157 | 0.5832 | 58.34431 | 7.94 | 11.037 | 0 | 0 | 0.0029 | 1 |
| 2011 | 157 | 0.7508 | 86.74412 | 3.14 | 11.0435 | 0.02247 | 0 | -0.1039 | 0 |

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|---|---|---|---|---|---|---|---|---|---|
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| 2012 | 157 | 0.5721 | 58.02746 | 2.51 | 11.066 | 0.05775 | 0 | 0.0919 | 0 |
| 2008 | 158 | 1.2223 | 126.355 | 1.06 | 10.8905 | 0.1729 | 0 | 0.0797 | 0 |
| 2009 | 158 | 0.5705 | 77.50687 | 1.27 | 10.5027 | 0.14718 | 0 | 0.0343 | 0 |
| 2010 | 158 | 0.4472 | 88.30027 | 1.37 | 10.5974 | 0.15804 | 0 | 0.037 | 0 |
| 2011 | 158 | 0.7567 | 124.8909 | 1.42 | 10.6632 | 0.14836 | 0 | 0.0757 | 0 |
| 2012 | 158 | 0.4558 | 98.52528 | 1.42 | 11.2883 | 0.12941 | 0 | 0.1172 | 0 |
| 2008 | 159 | 0.8186 | 90.97215 | 2.64 | 12.5559 | 0.17611 | 0.0041 | 0.0582 | 1 |
| 2009 | 159 | 0.6425 | 65.72129 | 2.91 | 12.4398 | 0.14654 | 0.0054 | 0.1255 | 1 |
| 2010 | 159 | 1.0226 | 72.65204 | 2.78 | 12.3345 | 0.10627 | 0.0055 | 0.1139 | 1 |
| 2011 | 159 | 0.7395 | 113.636 | 3.1 | 12.1656 | 0.1006 | 0.0042 | 0.0656 | 1 |
| 2012 | 159 | 0.5483 | 95.20525 | 2.81 | 12.3742 | 0.12999 | 0.0039 | 0.0926 | 1 |
| 2008 | 160 | 0.3348 | 129.6456 | 1.79 | 12.1301 | 0.21335 | 0.017 | 0.0821 | 1 |
| 2009 | 160 | 0.4921 | 115.5131 | 2.19 | 12.1205 | 0.20185 | 0.0167 | 0.1068 | 1 |
| 2010 | 160 | 0.5974 | 123.5833 | 1.93 | 12.186 | 0.27034 | 0.0137 | 0.1001 | 1 |
| 2011 | 160 | 0.7233 | 115.9186 | 1.76 | 12.3961 | 0.28649 | 0.0117 | 0.0751 | 1 |
| 2012 | 160 | 0.5742 | 121.8349 | 1.69 | 12.5728 | 0.32244 | 0.019 | 0.078 | 1 |
| 2008 | 161 | 0.2131 | 186.9522 | 0.97 | 11.6621 | 0.39188 | 0.0123 | 0.0359 | 0 |
| 2009 | 161 | 0.1358 | 172.961 | 0.91 | 11.6764 | 0.36983 | 0.0119 | 0.029 | 0 |
| 2010 | 161 | 0.1822 | 191.309 | 0.97 | 11.6262 | 0.37429 | 0.0114 | 0.0379 | 0 |
| 2011 | 161 | 0.1861 | 192.5743 | 1.01 | 11.6349 | 0.34839 | 0.0104 | 0.0354 | 0 |
| 2012 | 161 | 0.1836 | 176.3864 | 1.03 | 11.7227 | 0.30736 | 0.0205 | 0.0261 | 0 |
| 2008 | 162 | 0.4372 | 70.42065 | 1.09 | 12.9096 | 0.37909 | 0 | 0.0484 | 1 |
| 2009 | 162 | 0.3001 | 47.92842 | 1.14 | 12.8926 | 0.31132 | 0 | 0.0525 | 1 |
| 2010 | 162 | 0.7919 | 47.91982 | 1.28 | 13.136 | 0.31107 | 0.0002 | 0.1103 | 1 |
| 2011 | 162 | 0.6081 | 51.70513 | 1.09 | 13.1237 | 0.27579 | 0.0002 | 0.0675 | 1 |
| 2012 | 162 | 0.2880 | 52.33004 | 1.14 | 13.1575 | 0.24805 | 0.0002 | 0.0523 | 1 |
| 2008 | 163 | 0.5665 | 167.8088 | 1.13 | 11.2692 | 0.47004 | 0 | 0.0399 | 0 |
| | | | | | | | | - | |
| 2009 | 163 | 0.8939 | 65.70451 | 1.1 | 11.0279 | 0.47607 | 0 | 0.2057 | 0 |
| 2010 | 163 | 0.5409 | 65.99084 | 1.19 | 11.0152 | 0.31823 | 0 | 0.061 | 0 |
| 2011 | 163 | 0.5628 | 45.59979 | 1.11 | 11.0274 | 0.30366 | 0 | 0.078 | 0 |
| 2012 | 163 | 0.9495 | 22.09976 | 0.94 | 11.0492 | 0.28982 | 0 | 0.0514 | 0 |
| 2008 | 164 | 0.7379 | 106.9887 | 1.11 | 10.5794 | 0.25943 | 0 | 0.0368 | 0 |
| 2009 | 164 | 0.4310 | 188.5934 | 1.24 | 10.0916 | 0.27421 | 0 | 0.0156 | 0 |
| 2010 | 164 | 0.4393 | 206.5018 | 1.25 | 10.1264 | 0.2621 | 0 | 0.0193 | 0 |
| 2011 | 164 | 0.3525 | 256.551 | 1.78 | 9.99962 | 0.20809 | 0 | 0.0153 | 0 |
| | | | | | | | | - | |
| 2012 | 164 | 0.4751 | 211.6756 | 1.52 | 10.1451 | 0.25194 | 0 | 0.0061 | 0 |
| 2008 | 165 | 0.4212 | 100.8503 | 2.89 | 12.0621 | 0.13905 | 0.0015 | 0.0583 | 1 |
| 2009 | 165 | 0.3110 | 75.96036 | 3.44 | 12.2961 | 0.06301 | 0 | 0.1549 | 1 |
| 2010 | 165 | 0.6437 | 88.72418 | 2.65 | 12.4711 | 0.10103 | ###### | 0.1514 | 1 |
| 2011 | 165 | 0.5835 | 76.11205 | 2.46 | 12.5587 | 0.10595 | ###### | 0.0863 | 1 |

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|---|---|---|---|---|---|---|---|---|---|
| 2012 | 165 | 0.4283 | 73.01011 | 2.48 | 12.7556 | 0.13802 | 0 | 0.1388 | 1 |
| 2008 | 166 | 1.3226 | 105.2732 | 24.4 | 9.76572 | 0.0077 | 0 | 0.0029 | 0 |
| 2009 | 166 | 1.1222 | 332.7588 | 0.94 | 9.90539 | 0.27812 | 0 | 0.0241 | 0 |
| 2010 | 166 | 1.1892 | 387.2077 | 2.04 | 9.86848 | 0.14636 | 0 | 0.0432 | 0 |
| 2011 | 166 | 0.9576 | 497.8651 | 3.34 | 9.92613 | 0.11712 | 0.0003 | 0.0453 | 0 |
| 2012 | 166 | 0.9345 | 674.2979 | 16 | 9.79596 | 0.01218 | 0.0003 | 0.0406 | 0 |
| 2008 | 167 | 0.8283 | 156.526 | 2.04 | 11.681 | 0.25036 | 0.0758 | 0.0919 | 1 |
| 2009 | 167 | 0.7022 | 190.3788 | 2.06 | 11.6208 | 0.27101 | 0.0732 | 0.0727 | 0 |
| 2010 | 167 | 1.1797 | 230.4803 | 1.99 | 11.3948 | 0.34919 | 0.059 | -0.098 | 0 |
| 2011 | 167 | 1.0540 | 186.5604 | 2.48 | 11.2802 | 0.2222 | 0.0277 | 0.0798 | 0 |
| 2012 | 167 | 1.0941 | 225.5489 | 2.06 | 11.0235 | 0.26877 | 0.0261 | -0.0159 | 0 |
| 2008 | 168 | 0.5277 | 48.93013 | 1.7 | 10.7737 | 0.10302 | 0.5284 | -0.0759 | 0 |
| 2009 | 168 | 0.4363 | 77.99377 | 1.64 | 10.463 | 0.12193 | 0.5312 | -0.0116 | 0 |
| 2010 | 168 | 0.5575 | 98.92798 | 1.9 | 10.7876 | 0.06383 | 0.4821 | 0.1128 | 0 |
| 2011 | 168 | 0.5797 | 57.22184 | 1.95 | 10.3815 | 0.01986 | 0.5168 | -0.05 | 0 |
| 2012 | 168 | 0.4141 | 54.74041 | 1.93 | 10.8832 | 0 | 0.4964 | 0.0152 | 0 |
| 2008 | 169 | 1.1548 | 21.47276 | 5.74 | 13.2401 | 0 | 0 | 0.0847 | 1 |
| 2009 | 169 | 1.0590 | 9.269756 | 5.44 | 13.3061 | 0 | 0 | 0.0755 | 1 |
| 2010 | 169 | 1.6477 | 10.12421 | 4.01 | 13.4295 | 0 | 0 | 0.0971 | 1 |
| 2011 | 169 | 2.1955 | 10.31952 | 4.43 | 13.5429 | 0 | 0 | 0.122 | 1 |
| 2012 | 169 | 2.0762 | 15.25752 | 4.79 | 13.6241 | 0 | 0 | 0.1048 | 1 |
| 2008 | 170 | 0.4525 | 314.6717 | 2.51 | 11.396 | 0.23699 | 0 | 0.0122 | 1 |
| 2009 | 170 | 0.5030 | 358.6763 | 2 | 10.8701 | 0.28666 | 0 | -0.1664 | 0 |
| 2010 | 170 | 0.3451 | 206.0493 | 2.2 | 10.968 | 0.25561 | 0 | 0.0323 | 0 |
| 2011 | 170 | 0.2688 | 234.4054 | 2.34 | 10.849 | 0.23192 | 0 | 0.0327 | 0 |
| 2012 | 170 | 0.2833 | 234.1856 | 2.23 | 10.7861 | 0.21905 | 0 | 0.0081 | 0 |
| 2008 | 171 | 1.5893 | 175.9324 | 1.63 | 14.069 | 0.24903 | 0.1103 | 0.0524 | 1 |
| 2009 | 171 | 0.5568 | 155.4829 | 1.5 | 13.9999 | 0.26155 | 0.1129 | 0.0458 | 1 |
| 2010 | 171 | 0.7721 | 119.5817 | 1.43 | 14.396 | 0.22249 | 0.0804 | 0.09 | 1 |
| 2011 | 171 | 0.8117 | 116.3493 | 1.23 | 14.4696 | 0.26018 | 0.0849 | -0.0279 | 1 |
| 2012 | 171 | 0.6578 | 108.2818 | 1.27 | 14.2863 | 0.26716 | 0.0823 | -0.0168 | 0 |
| 2008 | 172 | 0.4342 | 158.7586 | 1.37 | 12.6811 | 0.40604 | 0.0068 | 0.027 | 1 |
| 2009 | 172 | 0.3016 | 174.3803 | 1.42 | 12.54 | 0.40653 | 0.0074 | 0.0377 | 1 |
| 2010 | 172 | 0.4204 | 146.2579 | 1.44 | 12.624 | 0.3882 | 0.0075 | 0.0382 | 1 |
| 2011 | 172 | 0.7073 | 156.1145 | 1.45 | 12.6047 | 0.37972 | 0.0046 | 0.0387 | 1 |
| 2012 | 172 | 0.5425 | 127.8442 | 1.25 | 12.7618 | 0.44173 | 0.0043 | -0.0305 | 1 |
| 2008 | 173 | 0.7973 | 257.84 | 1.12 | 9.75568 | 0.14826 | 0.0425 | - | 0 |

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|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 0.0748 | |
| | | | | | | | | - | |
| 2009 | 173 | 0.3804 | 194.5556 | 2.4 | 9.7964 | 0.06906 | 0.0964 | 0.0284 | 0 |
| 2010 | 173 | 0.4828 | 192.902 | 2.92 | 9.88583 | 0.04274 | 0.0534 | 0.0051 | 0 |
| | | | | | | | | - | |
| 2011 | 173 | 1.7802 | 149.6675 | 1.66 | 10.0591 | 0.02665 | 0.046 | 0.0428 | 0 |
| 2012 | 173 | 1.3634 | 34.48178 | 1.31 | 11.8159 | 0.01836 | 0.0275 | 0.0313 | 0 |
| 2008 | 174 | 0.5041 | 33.3242 | 0.93 | 12.8616 | 0.17546 | 0.001 | 0.0453 | 1 |
| 2009 | 174 | 0.3665 | 32.0635 | 1.05 | 12.7058 | 0.13331 | 0.0712 | 0.0586 | 1 |
| 2010 | 174 | 0.4635 | 41.59219 | 1.13 | 12.7817 | 0.15577 | 0.0012 | 0.0556 | 1 |
| 2011 | 174 | 0.4301 | 51.40213 | 1.35 | 12.7919 | 0.17808 | 0 | 0.0242 | 1 |
| 2012 | 174 | 0.3188 | 49.96347 | 1.36 | 12.8791 | 0.14864 | 0 | 0.073 | 1 |
| | | | | | | | | - | |
| 2008 | 175 | 0.2282 | 96.68405 | 1.13 | 11.9272 | 0.30051 | 0.01 | 0.0286 | 0 |
| 2009 | 175 | 0.1923 | 66.61858 | 1.4 | 11.8109 | 0.20929 | 0.0116 | 0.0111 | 0 |
| 2010 | 175 | 0.1714 | 72.79886 | 1.73 | 11.7464 | 0.18285 | 0 | 0.0662 | 1 |
| | | | | | | | | - | |
| 2011 | 175 | 0.3963 | 114.643 | 1.78 | 11.4355 | 0.14889 | 0 | 0.0027 | 0 |
| | | | | | | | | - | |
| 2012 | 175 | 0.2069 | 100.2981 | 1.77 | 11.4641 | 0.17499 | 0 | 0.0221 | 0 |
| 2008 | 176 | 1.4238 | 122.8161 | 2.5 | 11.61 | 0.04926 | 0 | 0.1967 | 1 |
| 2009 | 176 | 1.0280 | 121.1859 | 2.89 | 11.973 | 0.03871 | 0.0031 | 0.232 | 1 |
| 2010 | 176 | 1.3310 | 160.0731 | 2.59 | 11.8376 | 0.02866 | 0 | 0.1559 | 1 |
| 2011 | 176 | 1.0565 | 157.9738 | 2.7 | 11.6624 | 0.0795 | 0 | 0.0868 | 1 |
| 2012 | 176 | 0.7936 | 181.7324 | 2.34 | 11.48 | 0.12877 | 0 | 0.0626 | 1 |
| | | | | | | | | - | |
| 2008 | 177 | 0.6538 | 63.723 | 1.05 | 12.3453 | 0.49984 | 0.059 | 0.0375 | 0 |
| | | | | | | | | - | |
| 2009 | 177 | 0.7213 | 62.93176 | 1.03 | 12.1578 | 0.5382 | 0.0056 | 0.0626 | 0 |
| | | | | | | | | - | |
| 2010 | 177 | 0.7429 | 67.89147 | 0.61 | 12.0577 | 0.63684 | 0 | 0.0044 | 1 |
| 2011 | 177 | 0.9579 | 91.19623 | 0.44 | 11.9584 | 0.64852 | 0 | 0.0421 | 0 |
| 2012 | 177 | 0.8891 | 102.1382 | 1.54 | 12.1989 | 0.14816 | 0 | 0.2259 | 0 |
| 2008 | 178 | 0.5465 | 71.40486 | 6.11 | 11.0358 | 0 | 0 | 0.0915 | 1 |
| 2009 | 178 | 0.4789 | 90.20286 | 4.39 | 10.4813 | 0 | 0.0295 | 0.0152 | 1 |
| 2010 | 178 | 0.4764 | 114.3785 | 5.78 | 10.5911 | 0 | 0 | 0.0155 | 0 |
| | | | | | | | | - | |
| 2011 | 178 | 0.4297 | 123.8833 | 4.71 | 10.6465 | 0 | 0 | 0.0107 | 0 |
| | | | | | | | | - | |
| 2012 | 178 | 0.3455 | 116.3586 | 5.63 | 10.501 | 0 | 0 | 0.0246 | 0 |
| | | | | | | | | - | |
| 2008 | 179 | 0.3307 | 149.7728 | 1.22 | 11.846 | 0.36977 | 0 | 0.0501 | 0 |
| | | | | | | | | - | |
| 2009 | 179 | 0.2440 | 88.23584 | 1.21 | 11.8325 | 0.29427 | 0 | 0.0264 | 0 |
| 2010 | 179 | 0.5905 | 92.78325 | 1.21 | 11.8839 | 0.32905 | 0 | - | 0 |

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|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 0.0196 | |
| 2011 | 179 | 0.4563 | 138.904 | 1.32 | 11.3984 | 0.29826 | 0 | 0.0203 | 0 |
| 2012 | 179 | 0.4204 | 129.3457 | 1.46 | 11.6285 | 0.27879 | 0 | 0.0483 | 0 |
| 2008 | 180 | 1.2638 | 325.0097 | 1.44 | 9.4265 | 0.18644 | 0.0067 | 0.0013 | 0 |
| | | | | | | | | - | |
| 2009 | 180 | 0.7427 | 212.3298 | 2.25 | 9.62119 | 0.13751 | 0 | 0.1499 | 0 |
| 2010 | 180 | 0.6961 | 221.7929 | 3.22 | 9.23464 | 0.12721 | 0 | -0.023 | 0 |
| 2011 | 180 | 1.4275 | 428.7083 | 5.42 | 9.16136 | 0.12261 | 0 | 0.0026 | 0 |
| 2012 | 180 | 0.8540 | 301.8607 | 6.32 | 9.09863 | 0.12796 | 0 | 0.0677 | 0 |
| 2008 | 181 | 1.1426 | 70.06388 | 2.81 | 12.7365 | 0.0032 | 0 | 0.0874 | 1 |
| 2009 | 181 | 0.8505 | 58.5379 | 4.76 | 12.5423 | 0 | 0 | 0.0558 | 1 |
| 2010 | 181 | 0.9758 | 65.5281 | 3.46 | 12.529 | 0 | 0 | 0.0639 | 1 |
| 2011 | 181 | 0.8241 | 62.92697 | 2.77 | 12.5822 | 0 | 0 | 0.0675 | 1 |
| 2012 | 181 | 0.7166 | 0 | 3.14 | 12.6662 | 0 | 0 | 0.0664 | 1 |
| 2008 | 182 | 0.2949 | 51.42357 | 1.11 | 12.8045 | 0.55071 | 0.0594 | 0.02 | 0 |
| 2009 | 182 | 0.1233 | 53.95488 | 0.95 | 12.8165 | 0.497 | 0.0522 | 0.0324 | 0 |
| 2010 | 182 | 0.1995 | 40.6202 | 0.98 | 13.2896 | 0.32881 | 0.0345 | 0.0223 | 0 |
| 2011 | 182 | 0.2715 | 36.09241 | 0.97 | 13.6526 | 0.39398 | 0.036 | 0.0265 | 0 |
| 2012 | 182 | 0.2040 | 46.15287 | 0.99 | 13.6533 | 0.44732 | 0.0319 | 0.0354 | 0 |
| | | | | | | | | - | |
| 2008 | 183 | 1.5260 | 126.9629 | 0.83 | 10.7114 | 0.33332 | 0.1328 | 0.2188 | 0 |
| | | | | | | | | - | |
| 2009 | 183 | 1.3113 | 176.166 | 0.9 | 10.2514 | 0.36814 | 0.1558 | 0.0131 | 0 |
| 2010 | 183 | 0.9957 | 500.8883 | 1.17 | 9.50024 | 0.1845 | 0 | -0.056 | 0 |
| | | | | | | | | - | |
| 2011 | 183 | 0.7612 | 947.7561 | 2.84 | 8.59397 | 0.11646 | 0 | 0.9136 | 0 |
| 2012 | 183 | 1.8583 | 510.3543 | 3.85 | 9.30255 | 0.08052 | 0 | 0.0302 | 0 |
| | | | | | | | | - | |
| 2008 | 184 | 0.5475 | 165.1603 | 2.09 | 10.4006 | 0.23778 | 0.0002 | 0.0522 | 1 |
| 2009 | 184 | 0.4855 | 144.7797 | 2.87 | 10.2878 | 0.2435 | 0.0002 | 0.0332 | 1 |
| 2010 | 184 | 0.4972 | 236.4632 | 2.93 | 9.80068 | 0.20916 | 0.0002 | 0.003 | 1 |
| 2011 | 184 | 0.7929 | 172.3257 | 1.84 | 10.3491 | 0.18701 | 0.0004 | 0.0485 | 1 |
| 2012 | 184 | 0.9122 | 135.138 | 2.1 | 10.2124 | 0.12852 | 0.0005 | 0.0763 | 1 |
| 2008 | 185 | 0.9606 | 64.82475 | 4.96 | 11.4493 | 0.03226 | 0.0021 | 0.0606 | 1 |
| 2009 | 185 | 0.8096 | 61.12823 | 5.01 | 11.4407 | 0.04235 | 0.0012 | 0.0736 | 1 |
| 2010 | 185 | 0.9449 | 90.80423 | 3.42 | 11.6351 | 0.0664 | 0.0009 | 0.1059 | 1 |
| 2011 | 185 | 1.0832 | 66.51873 | 4.18 | 11.761 | 0.03744 | 0.0012 | 0.1754 | 1 |
| 2012 | 185 | 1.1196 | 100.8266 | 4.14 | 11.6518 | 0.05133 | 0.0014 | 0.165 | 1 |
| | | | | | | | | - | |
| 2008 | 186 | 0.6326 | 104.8603 | 1.11 | 12.9622 | 0.20737 | 0 | 0.0058 | 0 |
| | | | | | | | | - | |
| 2009 | 186 | 0.3459 | 210.8519 | 1.43 | 12.081 | 0.1289 | 0 | 0.0332 | 0 |
| 2010 | 186 | 0.4825 | 311.3542 | 1.81 | 12.3913 | 0.28248 | 0 | 0.0221 | 0 |
| 2011 | 186 | 0.5451 | 706.7 | 1.51 | 11.6092 | 0.28188 | 0 | 0.0572 | 0 |

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|---|---|---|---|---|---|---|---|---|---|
| 2012 | 186 | 0.3962 | 318.7296 | 5.38 | 12.4562 | 0.1853 | 0 | 0.0842 | 1 |
| 2008 | 187 | 0.5776 | 91.75531 | 1.49 | 11.9738 | 0.22788 | 0.1202 | 0.0767 | 1 |
| 2009 | 187 | 0.5397 | 98.48089 | 1.76 | 11.9715 | 0.1415 | 0.028 | 0.1044 | 1 |
| 2010 | 187 | 0.8939 | 90.80008 | 1.4 | 12.1834 | 0.15824 | 0.0006 | 0.071 | 1 |
| 2011 | 187 | 0.8079 | 72.29465 | 1.52 | 12.424 | 0.14249 | 0.0008 | 0.0966 | 1 |
| 2012 | 187 | 0.9605 | 79.31343 | 1.94 | 12.485 | 0.14737 | 0.0001 | 0.1109 | 1 |
| 2008 | 188 | 0.4246 | 110.9553 | 1.58 | 10.8789 | 0.14765 | 0 | 0.0575 | 0 |
| 2009 | 188 | 0.3369 | 63.47041 | 2.06 | 10.7891 | 0.04171 | 0 | 0.072 | 0 |
| 2010 | 188 | 0.7623 | 163.3898 | 3.43 | 10.6906 | 0.0239 | 0 | 0.0478 | 0 |
| 2011 | 188 | 0.5649 | 72.71237 | 1.74 | 10.8095 | 0 | 0 | 0.085 | 0 |
| 2012 | 188 | 1.1714 | 51.08177 | 2.09 | 10.9344 | 0 | 0 | 0.1128 | 0 |
| 2008 | 189 | 0.8479 | 153.5346 | 1.17 | 12.9329 | 0.50057 | 0.0042 | 0.0716 | 1 |
| 2009 | 189 | 0.7671 | 140.3483 | 1.5 | 12.9139 | 0.44416 | 0.0345 | 0.1094 | 1 |
| 2010 | 189 | 0.7623 | 136.475 | 1.49 | 13.0149 | 0.41188 | 0.0037 | 0.0759 | 1 |
| 2011 | 189 | 0.7071 | 118.87 | 1.35 | 13.355 | 0.44061 | 0.003 | 0.089 | 1 |
| 2012 | 189 | 0.7681 | 102.0338 | 1.42 | 13.5671 | 0.45876 | 0.0017 | 0.0806 | 1 |
| 2008 | 190 | 0.6235 | 168.8186 | 1.71 | 12.0892 | 0.26506 | 0.002 | 0.0956 | 1 |
| 2009 | 190 | 0.4718 | 87.42283 | 2.58 | 12.222 | 0.12258 | 0.0022 | 0.123 | 1 |
| 2010 | 190 | 0.7022 | 117.5823 | 2.65 | 12.02 | 0.12866 | 0.0019 | 0.1353 | 1 |
| 2011 | 190 | 0.6408 | 122.2868 | 3.86 | 12.0465 | 0.08647 | 0.0019 | 0.1291 | 1 |
| 2012 | 190 | 0.6952 | 139.4106 | 4.73 | 12.1096 | 0.04574 | 0 | 0.1251 | 1 |
| 2008 | 191 | 0.5610 | 68.47222 | 1.6 | 11.267 | 0.08581 | 0 | 0.0521 | 1 |
| 2009 | 191 | 0.5870 | 59.03606 | 2.47 | 11.3216 | 0.04982 | 0 | 0.0658 | 1 |
| 2010 | 191 | 0.7256 | 63.2866 | 2.34 | 11.1184 | 0.01898 | 0 | 0.0466 | 1 |
| 2011 | 191 | 0.6770 | 67.27747 | 2.54 | 11.0787 | 0.01179 | 0 | 0.0431 | 1 |
| 2012 | 191 | 0.6472 | 70.61976 | 2.88 | 11.0291 | 0.00778 | 0 | 0.0327 | 1 |
| 2008 | 192 | 0.4088 | 72.98239 | 1.49 | 11.993 | 0.27494 | 0.0027 | 0.0094 | 0 |
| 2009 | 192 | 0.1063 | 65.25545 | 1.46 | 12.036 | 0.26392 | 0.0028 | 0.0097 | 0 |
| 2010 | 192 | 0.7321 | 65.28223 | 1.49 | 12.1368 | 0.22207 | 0.0026 | 0.0585 | 0 |
| 2011 | 192 | 0.3991 | 71.86949 | 1.54 | 12.0535 | 0.22192 | 0.0029 | 0.072 | 0 |
| 2012 | 192 | 0.3245 | 82.38763 | 1.24 | 12.0304 | 0.31253 | 0.0024 | 0.0524 | 0 |
| 2008 | 193 | 0.4344 | 98.24318 | 1.48 | 12.2884 | 0.19641 | 0 | 0.0575 | 1 |
| 2009 | 193 | 0.4006 | 119.112 | 1.99 | 12.3095 | 0.1092 | 0 | 0.1496 | 1 |
| 2010 | 193 | 1.9336 | 103.2242 | 1.77 | 12.4978 | 0.1393 | 0 | 0.1159 | 1 |
| 2011 | 193 | 1.4020 | 98.26898 | 1.73 | 12.5575 | 0.15588 | 0 | 0.1165 | 1 |
| 2012 | 193 | 1.4227 | 107.3963 | 1.76 | 12.5381 | 0.12785 | 0 | 0.1465 | 1 |
| 2008 | 194 | 0.5307 | 169.7573 | 0.82 | 12.071 | 0.15483 | 0.0068 | ###### | 1 |
| 2009 | 194 | 0.3371 | 80.42076 | 0.63 | 12.2675 | 0.14672 | 0.008 | 0.0023 | 0 |
| 2010 | 194 | 0.5439 | 105.5413 | 0.48 | 12.198 | 0.17841 | 0.0072 | -0.0024 | 0 |
| 2011 | 194 | 0.9762 | 90.46467 | 0.6 | 12.4845 | 0.20006 | 0.003 | -0.0059 | 1 |
| 2012 | 194 | 0.9182 | 54.37758 | 1.31 | 12.1792 | 0.12813 | 0.0002 | ###### | 1 |

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|---|---|---|---|---|---|---|---|---|---|
| 2008 | 195 | 0.9500 | 89.20871 | 1.46 | 11.1337 | 0.20512 | 0 | 0.0082 | 0 |
| 2009 | 195 | 0.7884 | 84.46539 | 1.38 | 11.283 | 0.18944 | 0 | 0.0522 | 1 |
| 2010 | 195 | 0.9420 | 98.923 | 1.37 | 11.5071 | 0.2264 | 0 | 0.0489 | 0 |
| 2011 | 195 | 1.1690 | 100.6825 | 1.39 | 11.7665 | 0.26552 | 0 | 0.0435 | 1 |
| 2012 | 195 | 0.9526 | 101.4196 | 1.41 | 11.7352 | 0.26058 | 0 | 0.0578 | 1 |
| 2008 | 196 | 0.3706 | 249.5312 | 2.82 | 11.5636 | 0.24903 | 0 | 0.0411 | 1 |
| 2009 | 196 | 0.3527 | 198.3395 | 5.17 | 11.5835 | 0.14818 | 0.0026 | 0.0764 | 1 |
| 2010 | 196 | 0.3776 | 249.3465 | 4.04 | 11.4675 | 0.16615 | 0.0001 | 0.0751 | 1 |
| 2011 | 196 | 0.3949 | 232.9566 | 2.03 | 11.8072 | 0.24473 | 0.0554 | 0.0757 | 1 |
| 2012 | 196 | 0.6152 | 126.9968 | 3.29 | 12.4146 | 0.15836 | 0.0487 | 0.1352 | 1 |
| 2008 | 197 | 0.7573 | 170.6959 | 1.98 | 13.6826 | 0.19308 | 0.0006 | 0.0945 | 1 |
| 2009 | 197 | 0.6503 | 169.1283 | 2.15 | 13.6827 | 0.12054 | 0.0086 | 0.0642 | 1 |
| 2010 | 197 | 0.6418 | 154.2524 | 2.72 | 13.8082 | 0.09594 | 0.0068 | 0.1142 | 1 |
| 2011 | 197 | 1.2102 | 162.894 | 2.61 | 13.898 | 0.14681 | 0.0095 | 0.1088 | 1 |
| 2012 | 197 | 0.9210 | 157.2437 | 3.14 | 13.9664 | 0.13417 | 0.0001 | 0.11 | 1 |
| 2008 | 198 | 0.8063 | 46.43413 | 1.33 | 13.7018 | 0.18097 | 0.0244 | 0.0686 | 1 |
| 2009 | 198 | 0.5324 | 80.98359 | 1.46 | 13.6735 | 0.1838 | 0.0708 | 0.1058 | 1 |
| 2010 | 198 | 0.7920 | 71.76565 | 1.51 | 13.5876 | 0.19914 | 0.0825 | 0.0403 | 1 |
| 2011 | 198 | 1.6234 | 51.96011 | 1.36 | 13.4708 | 0.20708 | 0.0673 | -0.0738 | 0 |
| 2012 | 198 | 1.3412 | 55.36557 | 1.29 | 13.6252 | 0.20473 | 0.0012 | -0.0259 | 0 |
| 2008 | 199 | 0.4135 | 120.8615 | 1.41 | 12.6402 | 0.14968 | 0.0208 | 0.095 | 1 |
| 2009 | 199 | 0.3543 | 132.1386 | 1.5 | 12.8187 | 0.13258 | 0.0202 | 0.1242 | 1 |
| 2010 | 199 | 0.6762 | 117.4358 | 2.09 | 12.925 | 0.09115 | 0.0179 | 0.149 | 1 |
| 2011 | 199 | 0.8991 | 100.5668 | 2.61 | 12.9759 | 0.0807 | 0.0158 | 0.1676 | 1 |
| 2012 | 199 | 0.9038 | 98.15666 | 3.55 | 13.0621 | 0.0168 | 0.0145 | 0.1641 | 1 |
| 2008 | 200 | 0.8746 | 76.47702 | 0.13 | 11.1761 | 0.6992 | 0.0163 | -0.0011 | 0 |
| 2009 | 200 | 0.9692 | 97.2046 | 0.1 | 10.9013 | 0.75681 | 0.0168 | -0.0119 | 0 |
| 2010 | 200 | 2.1445 | 278.6237 | 0.62 | 11.9954 | 0.63364 | 0.0156 | 0.2264 | 0 |
| 2011 | 200 | 2.2127 | 345.8019 | 1.68 | 11.1007 | 0.16057 | 0.0347 | 0.1418 | 0 |
| 2012 | 200 | 1.3250 | 131.2255 | 1.52 | 11.2695 | 0.1457 | 0.0278 | -0.0351 | 0 |
| 2008 | 201 | 0.9444 | 84.3194 | 1.28 | 11.222 | 0.48812 | 0 | 0.0459 | 0 |
| 2009 | 201 | 0.6539 | 93.33737 | 1.36 | 11.0283 | 0.45212 | 0 | 0.0261 | 0 |
| 2010 | 201 | 0.5514 | 105.5058 | 1.04 | 11.0946 | 0.4606 | 0 | 0.0216 | 0 |
| 2011 | 201 | 0.5021 | 83.48044 | 1.09 | 11.0936 | 0.50591 | 0 | 0.0403 | 0 |
| 2012 | 201 | 0.4247 | 92.44669 | 1.4 | 11.2257 | 0.47697 | 0.028 | 0.089 | 0 |
| 2008 | 202 | 0.7975 | 185.363 | 1.09 | 10.6577 | 0.40092 | 0.0027 | 0.0282 | 0 |
| 2009 | 202 | 0.3944 | 163.364 | 1.33 | 10.8733 | 0.32343 | 0.0026 | 0.0935 | 0 |
| 2010 | 202 | 0.4225 | 140.4002 | 2 | 11.0235 | 0.27456 | 0.0026 | 0.0946 | 1 |

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|---|---|---|---|---|---|---|---|---|---|
| 2011 | 202 | 0.3732 | 138.1034 | 1.8 | 11.1053 | 0.2834 | 0.0025 | 0.0633 | 1 |
| 2012 | 202 | 0.5494 | 146.5377 | 2.04 | 11.0357 | 0.26162 | 0.0025 | 0.044 | 0 |
| 2008 | 203 | 0.2207 | 148.6555 | 1.22 | 12.1579 | 0.37033 | 0.0091 | 0.0381 | 0 |
| 2009 | 203 | 0.1519 | 169.4885 | 1.25 | 11.9606 | 0.34575 | 0.0085 | 0.0482 | 1 |
| 2010 | 203 | 0.2595 | 110.1674 | 1.25 | 12.2854 | 0.31311 | 0.0085 | 0.0522 | 0 |
| 2011 | 203 | 0.3504 | 105.3361 | 1.17 | 12.3268 | 0.32406 | 0.0085 | 0.0538 | 0 |
| 2012 | 203 | 0.2901 | 99.09157 | 1.26 | 12.3429 | 0.31168 | 0.0079 | 0.0581 | 0 |
| 2008 | 204 | 0.1448 | 111.0256 | 0.99 | 12.0049 | 0.32684 | 0.0035 | 0.0413 | 0 |
| 2009 | 204 | 0.3558 | 116.0309 | 1.13 | 11.788 | 0.28055 | 0.0035 | 0.0637 | 1 |
| 2010 | 204 | 0.4004 | 118.889 | 1.1 | 11.891 | 0.28501 | 0.0035 | 0.0576 | 1 |
| 2011 | 204 | 0.3735 | 121.7599 | 1.17 | 11.9271 | 0.28457 | 0.0033 | 0.0595 | 0 |
| 2012 | 204 | 0.3376 | 121.0765 | 1.42 | 11.8463 | 0.23579 | 0.0033 | 0.0949 | 0 |
| 2008 | 205 | 1.0729 | 72.73525 | 0.91 | 11.6183 | 0.26583 | 0 | 0.035 | 0 |
| 2009 | 205 | 0.7341 | 63.43296 | 1.11 | 11.3724 | 0.25636 | 0 | 0.0955 | 0 |
| 2010 | 205 | 1.1995 | 49.46071 | 1.06 | 11.5168 | 0.29826 | 0 | 0.0516 | 0 |
| 2011 | 205 | 0.9182 | 55.32581 | 1.54 | 11.5699 | 0.20814 | 0 | 0.0367 | 0 |
| 2012 | 205 | 0.5851 | 53.61662 | 1.45 | 11.4337 | 0.18678 | 0 | -0.0095 | 0 |
| 2008 | 206 | 1.0914 | 83.16248 | 4.64 | 11.074 | 0.13306 | 0 | 0.1792 | 1 |
| 2009 | 206 | 0.9378 | 151.842 | 7.68 | 11.0309 | 0.11488 | 0 | 0.1124 | 1 |
| 2010 | 206 | 0.8108 | 139.7701 | 4.71 | 11.1231 | 0.10104 | 0 | 0.1242 | 1 |
| 2011 | 206 | 0.7408 | 156.1132 | 3.78 | 11.2262 | 0.08358 | 0 | 0.1055 | 1 |
| 2012 | 206 | 1.0189 | 153.9685 | 3.89 | 11.3158 | 0.05724 | 0 | 0.1118 | 1 |
| 2008 | 207 | 0.7987 | 61.02197 | 1.35 | 13.3948 | 0.1139 | 0.0026 | 0.0954 | 1 |
| 2009 | 207 | 0.6146 | 64.50447 | 1.56 | 13.1416 | 0.06263 | 0 | 0.071 | 1 |
| 2010 | 207 | 0.8327 | 67.61117 | 1.4 | 13.4514 | 0.10101 | 0.0004 | 0.1038 | 1 |
| 2011 | 207 | 1.2106 | 58.155 | 1.54 | 13.5974 | 0.06552 | 0 | 0.1344 | 1 |
| 2012 | 207 | 1.0587 | 63.4444 | 1.39 | 13.6888 | 0.06887 | 0.0004 | 0.133 | 1 |
| 2008 | 208 | 2.6476 | 97.67441 | 2.1 | 17.3432 | 0.13695 | 0.0023 | 0.1521 | 1 |
| 2009 | 208 | 1.7980 | 113.9478 | 1.71 | 17.2499 | 0.16083 | 0.0037 | 0.0949 | 1 |
| 2010 | 208 | 2.5524 | 91.50365 | 1.65 | 17.3073 | 0.20532 | 0.0029 | 0.0592 | 1 |
| 2011 | 208 | 2.2673 | 90.72594 | 1.71 | 17.5498 | 0.16722 | 0.002 | 0.1335 | 1 |
| 2012 | 208 | 2.2881 | 99.29667 | 1.53 | 17.6784 | 0.20712 | 0.0183 | 0.1266 | 1 |
| 2008 | 209 | 0.4105 | 91.70013 | 1.17 | 11.7334 | 0.24472 | 0 | 0.1104 | 1 |
| 2009 | 209 | 0.3621 | 79.53863 | 1.29 | 11.8739 | 0.25603 | 0.0029 | 0.1051 | 1 |
| 2010 | 209 | 0.3810 | 100.9135 | 1.59 | 11.7134 | 0.16175 | 0.003 | 0.0964 | 1 |
| 2011 | 209 | 0.4159 | 87.57817 | 1.76 | 11.8382 | 0.10825 | 0.0029 | 0.1032 | 1 |
| 2012 | 209 | 0.4185 | 99.36501 | 2.29 | 11.5512 | 0.06871 | 0.003 | 0.0576 | 1 |
| 2008 | 210 | 0.9242 | 51.75729 | 1.11 | 14.1734 | 0.43804 | 0.0822 | 0.0381 | 0 |
| 2009 | 210 | 0.7508 | 60.628 | 1.06 | 13.96 | 0.43838 | 0.1094 | 0.0172 | 0 |
| 2010 | 210 | 0.7808 | 72.68489 | 0.91 | 13.8725 | 0.47077 | 0.0872 | 0.0297 | 0 |
| 2011 | 210 | 0.6957 | 71.54543 | 0.98 | 13.8961 | 0.47546 | 0.0828 | 0.0322 | 0 |
| 2012 | 210 | 0.4021 | 52.3162 | 0.98 | 13.8262 | 0.3481 | 0.0641 | 0.0136 | 0 |

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|---|---|---|---|---|---|---|---|---|---|
| 2008 | 211 | 0.5765 | 83.1843 | 1.84 | 13.2438 | 0.18633 | 0 | 0.0204 | 1 |
| 2009 | 211 | 0.4120 | 91.31741 | 2.4 | 12.9209 | 0.07799 | 0 | 0.0669 | 1 |
| 2010 | 211 | 0.3863 | 70.46995 | 2.24 | 13.0993 | 0.09096 | 0 | 0.0721 | 1 |
| 2011 | 211 | 0.4436 | 92.26167 | 2.07 | 13.1993 | 0.10518 | 0 | 0.078 | 1 |
| 2012 | 211 | 0.5468 | 71.89284 | 2.41 | 13.3554 | 0.1179 | 0 | 0.0765 | 1 |
| 2008 | 212 | 0.2632 | 98.20612 | 1.34 | 12.1164 | 0.34566 | 0.0014 | 0.0832 | 1 |
| 2009 | 212 | 0.2130 | 98.47644 | 1.89 | 11.9771 | 0.13901 | 0.0011 | 0.1728 | 1 |
| 2010 | 212 | 1.4896 | 113.4016 | 1.92 | 12.1241 | 0.15361 | 0.0007 | 0.1281 | 1 |
| 2011 | 212 | 1.1561 | 102.8553 | 2.15 | 12.2663 | 0.1213 | 0.0006 | 0.1051 | 1 |
| 2012 | 212 | 0.9887 | 109.338 | 2.11 | 12.2864 | 0.13209 | 0.0016 | 0.1476 | 1 |
| 2008 | 213 | 0.6125 | 200.9394 | 4.79 | 11.8375 | 0.11282 | 0 | 0.1075 | 1 |
| 2009 | 213 | 0.5228 | 247.8843 | 3.05 | 11.6875 | 0.16689 | 0 | 0.0901 | 1 |
| 2010 | 213 | 0.5878 | 222.8828 | 4.12 | 11.77 | 0.1021 | 0 | 0.0928 | 1 |
| 2011 | 213 | 0.6675 | 199.3364 | 3.8 | 11.7557 | 0.1051 | 0 | 0.0628 | 1 |
| 2012 | 213 | 0.5782 | 232.837 | 3.68 | 11.7186 | 0.10101 | 0 | 0.0699 | 1 |
| 2008 | 214 | 0.4813 | 117.6595 | 0.79 | 11.0948 | 0.32835 | 0.1912 | -0.117 | 0 |
| 2009 | 214 | 0.3353 | 101.2022 | 0.69 | 10.87 | 0.29329 | 0.2063 | 0.0333 | 0 |
| 2010 | 214 | 0.3467 | 114.3457 | 0.75 | 10.9599 | 0.31081 | 0.1922 | 0.0081 | 0 |
| 2011 | 214 | 0.3873 | 102.7258 | 0.72 | 10.9112 | 0.30011 | 0.1798 | -0.0426 | 0 |
| 2012 | 214 | 0.5665 | 124.9769 | 0.89 | 11.0146 | 0.24884 | 0.1314 | 0.0324 | 0 |
| 2008 | 215 | 0.8521 | 69.29684 | 0.83 | 11.425 | 0.39754 | 0.1589 | -0.1584 | 0 |
| 2009 | 215 | 0.9149 | 72.21442 | 0.76 | 11.3241 | 0.37715 | 0.1765 | -0.0785 | 0 |
| 2010 | 215 | 2.0680 | 62.22533 | 0.46 | 11.1501 | 0.33607 | 0.0802 | -0.0836 | 0 |
| 2011 | 215 | 1.9248 | 67.75384 | 0.73 | 11.1611 | 0.31525 | 0.0874 | -0.0763 | 0 |
| 2012 | 215 | 3.7786 | 75.13739 | 0.67 | 10.9042 | 0.34449 | 0.0966 | -0.067 | 0 |