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RESEARCH PROJECT "JP MORGAN CHASE & CO"

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Abstract: *In this paper we will be focused on the impact of the 2007 economic and financial crisis on the equity of JP Morgan Chase & Co. In order to do so, a first chapter will be dedicated to overview the financial and economic crisis. In a second chapter we will present JP Morgan Chase & Co, their activities, products, services (…) and in a third chapter we will analyze the fluctuations of the equity of JP Morgan chase & Co on the period of 2007 till 2011.*

1. Overview of the 2007 economic and financial crisis:

Like all previous cycles of booms and busts, the seeds of the subprime meltdown were sown during unusual times. In 2001, the U.S. economy experienced a short recession. Although the economy nicely withstood terrorist attacks and the bust of the Internet bubble, the fear of recession really preoccupied everybody's minds.

In the following we will review the financial crisis and study the case of JP Morgan chase Bank; the impact of the crisis on JP Morgan chase and the procedures they implemented.

To keep recession away, the Federal Reserve lowered the Federal funds rate 11 times; from 6.5% in May 2000 to 1.75% in December 2001. Creating a flood of liquidity in the economy.

It found easy prey in restless bankers and even more in restless borrowers who had no income, no jobs, and no assets. These subprime borrowers wanted to realize their life's dream of acquiring a home. For them, it was a sign of hope. More home loans, more homebuyers, more appreciation in home prices.

This environment of easy credit and the upward spiral of home prices made investments in higher yielding subprime mortgages look like the deal of the century. The Fed continued to lower interest rate. In June 2003, the Fed lowered interest rates to 1%, the lowest rate in 45 years. What a godsend for the whole financial market. Houses' were sold at a huge discount and without any down payment.

Basically it was like everyone could buy his house now and pay for it later. But the bankers thought that it wasn't enough to lend the candies lying on their shelves. They decided to repackage the loans into collateralized debt obligations and pass on the debt to another institution. Soon a big secondary market for originating and distributing subprime loans developed. To make things merrier, in October 2004, the securities exchange commission relaxed the net capital requirement for five investment banks; Goldman Sachs, Merrill Lynch, Lehman Brothers, Bear Stearns and Morgan Stanley. Which freed them to leverage up to 30times or even 40-times their initial investment.

Every good item has a bad side, and several of these factors started to emerge alongside one another. The trouble started when the interest rates started rising and home ownership reached a saturation point. From June 30, 2004, onward, the Fed started raising rates so much that by June 2006, the Federal funds rate had reached 5.25%, which remained unchanged until August 2007.

There were early signs of distress: by 2004, U.S. homeownership had peaked at 70%; no one was interested in buying more. Then, during the last quarter of 2005, home prices started to fall, which led to a 40% decline in the U.S. Home Construction Index during 2006. Not only were new homes being affected, but also many subprime borrowers now could not withstand the higher interest rates and they started defaulting on their loans. This caused 2007 to start with bad news from multiple sources. Every month, one subprime lender or another was filing for bankruptcy. During February and March 2007, more than 25 subprime lenders filed for bankruptcy, which was enough to start the tide. In April, well-known New Century Financial also filed for bankruptcy. Problems in the subprime market began hitting the news raising more people's curiosity and stories or gossips if I may say started to leak out.

According to 2007 news reports, financial firms and hedge funds owned more than $1 trillion in securities backed by these now-failing subprime mortgages, enough to start a global financial tsunami if more subprime borrowers started defaulting. By June, Bear Stearns stopped redemptions in two of its hedge funds and Merrill Lynch seized $800 million in assets from two Bear Stearns hedge funds. But even this large move was only a small affair in comparison to what was to happen in the months ahead.

It became apparent in August 2007 that the financial market could not solve the subprime crisis on its own and the problems spread beyond the United State's borders. The interbank market froze completely, Northern Rock had to approach the Bank of England for emergency funding due to a liquidity problem. By that time, central banks and governments around the world had started coming together to prevent further financial chaos.

The subprime crisis's unique issues called for both conventional and unconventional methods, which were employed by governments worldwide. In a unanimous move, central banks of several countries resorted to coordinated action to provide liquidity support to financial institutions. The idea was to put the interbank market back on its feet. The Fed started slashing the discount rate as well as the funds rate, but bad news continued to pour in from all sides. Lehman Brothers filed for bankruptcy, Indymac bank collapsed, Bear Stearns was acquired by JP Morgan Chase, Merrill Lynch was sold to Bank of America, and Fannie Mae and Freddie Mac were put under the control of the U.S. federal government.

By October 2008, the Federal funds rate and the discount rate were reduced to 1% and 1.75%, respectively. Central banks in England, China, Canada, Sweden, Switzerland and the European Central Bank also resorted to rate cuts in order to aid the world economy. But rate cuts and liquidity support in itself were not enough to stop such a widespread financial meltdown.

The U.S. government then came out with National Economic Stabilization Act of 2008, which created a corpus of $700 billion to purchase distressed assets, especially mortgage-backed securities. Different governments came out with their own versions of bailout packages, government guarantees and outright nationalization.

The financial crisis of 2007-08 has taught us that the confidence of the financial market, once shattered, can't be quickly restored. In an interconnected world, a liquidity crisis can very quickly turn into a solvency crisis for financial institutions, a balance of payment crisis for sovereign countries and a full-blown crisis for the entire world. But the silver lining is that, after every crisis in the past, markets have come out strong to forge new beginnings.

2. J.P. Morgan Chase & Co:

J.P. Morgan Chase is one of the world's leading global banks, with one of the most extensive client bases in the world. It clients include corporations, governments, states, municipalities, healthcare organizations, educational institutions, banks and investors in more than 100 countries. They provide strategic advice, lend money, raise capital, and help manage risk, extend liquidity and hold global leadership positions in all of our major business lines. Their goal is to help clients succeed, contribute to orderly and well-functioning markets and support global economic growth. One of the most important functions is extending credit to companies to help them grow.

JP Morgan Chase have been helping their clients do business for more than 200 years, and in the words of one the founders, have a proud history of doing "only first-class business... in a first-class way." Their culture is defined as one driven by performance, partnership, meritocracy, inclusion and directness.

The firm is a leader in investment banking, financial services for consumers, small business and commercial banking, financial transaction processing, asset management and private equity. In the following, we will focalize our interests on two main parts of J.P. Morgan chase's activities; first the mergers and acquisitions and second the equities.

2.1. Mergers and Acquisitions:

J.P. Morgan Chase is one of the leading merger and acquisition advisory firms today, taking a top spot in many of the rankings for this sector. The firm's in-depth expertise extends to a wide range of strategic M&A transactions, including asset purchases and dispositions, restructurings and reorganizations. With its strong relationships with many of the leading financial sponsors groups, J.P. Morgan Chase is also able to help clients gain access to today's growing pool of private equity financings.

Examples of M&A by earn out (2001-2011):

Date	Deal value (mm$)	Target	Acquirer	Target Region	AcquirerRegion	Earn-out (mm$)	Earn-out (%)
24/09/08	23,143.50	British Energy pic	Electricite de France	Europe	Europe	10,100.00	43.60%
29/08/10	24,476.70	Genzyme Corp	Sanofi-Aventis	N.America	Europe	3,664.90	15.00%
18/02/04	2,952.50	Mobile TelephoneLicence	MTN Group	MEA	MEA	2,567.40	87.00%
10/11/08	3,375.00	Marcellus shale assets	StatoilHydro	N.America	Europe	2,125.00	63.00%
8/9/08	7,938.90	Coal seam gas assets	Conocophillips	Australia	N.America	2,000.10	25.20%
30/04/10	2,500.00	BSG Resources (51%)	Vale SA	Africa	S.America	2,000.00	80.00%
21/02/11	9,000.00	Reliance Industries Ltd (23 Oil and GasBlocks)	BP plc	India	Europe	1,800.00	20.00%
8/12/10	1,830.00	Mesoblast Ltd	Cephalon Inc	Australia	N.America	1,700.00	92.90%
30/06/08	3,300.00	Chesapeake Energy	Plains Exploraiton &Production Co	N.America	N.America	1,650.00	50.00%
21/05/10	3,800.00	Piramal Healthcare Ltd (DomesticFormulations Business)	Abbott Laboratories	India	N.America	1,600.00	42.10%

2.2. Equities:

J.P. Morgan Chase is a global leader in

providing a wide range of innovative equities solutions to investor and issuer clients from initial public offerings, secondary placements and equity-linked structures, to private placements, equity derivatives products, and block and portfolio trading services.

Offer of products and services:

- Worldwide trade execution services across all exchanges and electronic networks.
- Program and special equity trading services.
- Transition management services across all asset classes.
- Sales, trading and research services on equity-based derivatives, as well as risk management applications and structured products.
  A full range of equity-linked services, including competitive pricing and complex structuring for new equity-linked issuances, innovative ways to increase conversion premiums for issuers, and sales and trading services for institutional clients.
- Equity structuring and sales services in the primary markets, including initial public offerings, follow-on offerings and convertible securities.
- Clearance of OTC interest rate and credit derivatives, foreign exchange, OTC commodities and fixed income securities.
- Futures and options execution and clearing services on approximately 70 exchanges globally.

2.2.1. Cash Equities:

Serving corporate, institutional and hedge fund clients, J.P. Morgan chase offers a full service global equities platform, with execution capabilities across all listed and OTC market centers globally.

a. Block trading:

- Cash Sales and Trading
- Block Bids
- Reverse Inquiry

b. Special equity trading:

J.P. Morgan chase's Special Equity Group provides the firm's corporate, institutional and private equity clients with structuring advice and trade execution for non-traditional equity transactions. The group provides a multi-disciplinary approach in advising and solving a corporation's equity-related issues.

- Corporate Share Repurchase Programs
- Stock and Portfolio Sales
- Venture Capital Distributions

c. Portfolio trading:

J.P. Morgan chase 's execution capabilities cover the world's major equity markets, with memberships across most major markets (MSCI all country world index, MSCI EAFE…). They use proprietary order management and trading systems, which are designed to help achieve the most efficient and seamless execution from front to back and from inception to settlement.

Types of trade executed:

- Agency
- Guaranteed
- Incentive
- Exchange for Physical (EFP)
- Exchange Traded Funds (ETF)

d. Electronic Client Solution:

Electronic Client Solutions (ECS) designs, distributes and services leading edge analytics, execution and liquidity products globally to the client base. The complete ECS suite of electronic products is designed to source liquidity effectively across an ever-changing landscape of liquidity centers, minimize transaction costs and maintain anonymity for our clients. ECS includes:

- Pre-and post-trade analytics
- Global direct market access and smart order routing
- Global algorithmic trading products
- Differentiated liquidity

e. Commission management solutions:

The Commission Management Solutions (CMS) Program allows the bank to execute trades on behalf of clients at an agreed commission rate. The bank retains a portion of the commission for its clearing and execution services and disburses the remaining dollar amounts to pay for research or brokerage services.

CMS program different structures:

- Client Commission Arrangements / Commission Sharing Agreements
- Traditional Soft Dollar Arrangements

2.2.2. Equity Derivatives:

Institutional investors, distributors, corporates and private investors benefit from JP Morgan chase's unparalleled scale, breadth and expertise since they are a global firm with extensive knowledge of derivatives across all asset classes and they deliver a wide range of products.

a. Flow derivatives:

- ETFs
- Equity Swaps
- Equity Futures
- Listed and OTC options
- Volatility products

b. Structured finance solutions:

The Structured Finance team combines its expertise in the lending and capital markets offering innovative and multi-faceted structured financing solutions across equities and other asset classes.

- Acquisition financing
- Hedging and monetizing solutions
- Derivatives-based strategies

c. Equity derivatives structuring:

Equity Derivatives Structuring draws from a broad selection of strategies and products in creating bespoke risk management solutions specific to the client's risk-reward profile. The team provides exotics payoffs and cross-asset solutions for clients ranging from pension funds and insurance companies, to private banks, retail banks and asset managers. The Equity Derivatives Structuring group offers tailor-made solutions for clients drawing from the trading and risk management expertise of the entire EDG Trading platform. The primary function of EDG Structuring is to provide clients with the desired product payoff and underlying exposure, with a focus on ensuring seamless ongoing product maintenance.

Solutions Offered:

- Tradable Indices
- Equity Payoffs
- Fund Derivatives
- Strategic/Complex Structuring

d. Convertible equity derivatives:

Convertibles are hybrid instruments that effectively marry the defensive nature of a fixed income instrument with the upside potential in the price of the underlying equity.

3. Analyze of the equity of JP Morgan chase & Co on the period of 2007 till 2011:

JP Morgan Chase & Co has in the first quarter 2008 a net income of $702 million, compared with net income of $3.0 billion in the fourth quarter of 2007. Earnings per share were $0.07, compared with $0.86 in the fourth quarter of 2007. For the full year 2008, net income was $5.6 billion, or $1.37 per share, down 64% from $15.4 billion, or $4.38 per share, in 2007.

When a look is taken on the results of the investment banking operations we will see that net revenue was negative $302 million, a decrease of $3.5 billion from the prior year. Investment banking fees were $1.4 billion, down 17% from the prior year. Advisory fees were $579 million, down 10% from the prior year, reflecting decreased levels of activity, partially offset by improved market share. Debt underwriting fees were $464 million, down 1% from the prior year. Equity underwriting fees were $330 million, down

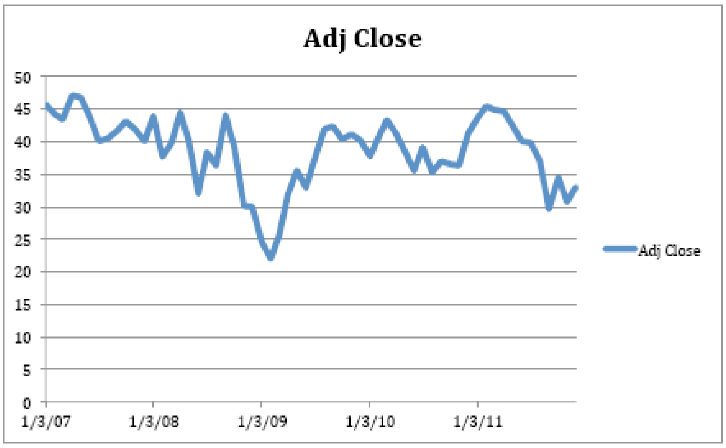
39% from the prior year. Fixed Income Markets revenue was negative $1.7 billion, compared with $615 million in the prior year. The decrease was driven by $1.8 billion of net markdowns on leveraged lending funded and unfunded commitments; $1.1 billion of net markdowns on mortgage-related exposures; weak trading results in credit-related products; and losses of $367 million from the tightening of the firm's credit spread on certain structured liabilities. These results were largely offset by record performance in rates and currencies and strong performance in commodities and emerging markets. Equity Markets revenue was negative $94 million, down by $672 million from the prior year, reflecting weak trading results and losses of $354 million from the tightening of the firm's credit spread on certain structured liabilities, partially offset by strong client revenue across products, including prime services. Credit Portfolio revenue was $90 million, down $232 million from the prior year For the retail financial service the net income was $624 million, a decrease of $107 million, or 15%, from the prior year, as a significant increase in the provision for credit losses was predominantly offset by positive MSR risk management results and the positive impact of the Washington Mutual transaction. Net revenue was $8.7 billion, an increase of $3.9 billion, or 81%, from the prior year. Net interest income was $4.7 billion, up $2.0 billion, or 75%, benefiting from the Washington Mutual transaction, wider deposit and loan spreads, and higher loan and deposit balances. Noninterest revenue was $4.0 billion, up $1.9 billion, or 88%, as positive MSR risk management results and the impact of the Washington Mutual transaction were offset partially by a decline in mortgage production revenue. The provision for credit losses was $3.6 billion, an increase of $2.5 billion from the prior year, as housing price declines continued to result in significant increases in estimated losses, particularly for high loan-to-value home equity and mortgage loans. The provision includes $1.6 billion in addition to the allowance for loan losses for the heritage Chase home equity and mortgage portfolios. Home equity net charge-offs were $770 million (2.15% net charge-off rate; 2.67% excluding purchased credit impaired loans), compared with $248 million (1.05% net charge-off rate) in the prior year. Subprime mortgage net charge-offs were $319 million (5.64% net charge-off rate; 8.08% excluding purchased credit impaired loans), compared with $71 million (2.08% net charge-off rate) in the prior year. Prime mortgage net charge-offs were $195 million (0.89% net charge-off rate; 1.20% excluding purchased credit impaired loans), compared with $17 million (0.22% net charge-off rate) in the prior year. The provision for credit losses was also affected by an increase in estimated losses for the auto and business banking loan portfolios. Non interest expense was $4.0 billion, an increase of $1.5 billion, or 59%, from the prior year, reflecting the impact of the Washington Mutual transaction, higher mortgage reinsurance losses, and increased servicing expense.

We will analyze in the following the evolution of the JPM index compared to the S&P 500 since 2007 till the end of 2011 using data extracted from yahoo finance.

Data: "JPM-NYSE"

Date	Open	High	Low	Close	Volume	Adj Close
12/1/11	30.86	34.19	30.03	33.25	39824000	33.01
11/1/11	32.47	35.18	28.28	30.97	42755300	30.75
10/3/11	30.03	37.54	27.85	34.76	52929900	34.51
9/1/11	37.62	37.82	28.53	30.12	51162600	29.64
8/1/11	41.16	41.37	32.31	37.56	53060700	36.97
7/1/11	40.81	42.55	38.93	40.45	35224400	39.81
6/1/11	42.87	42.99	39.24	40.94	37963700	40.05
5/2/11	45.94	46.07	41.69	43.24	29295500	42.3
4/1/11	46.55	47.8	43.53	45.63	30074100	44.63

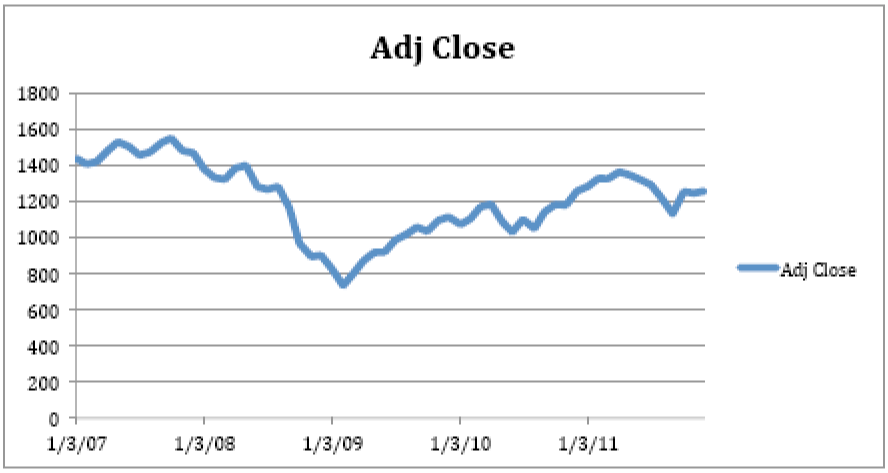
3/1/11	46.47	47.1	43.4	46.1	30781900	44.85
2/1/11	45.2	48.36	44.3	46.69	32819500	45.42
1/3/11	43	45.94	42.65	44.94	42552800	43.72
12/1/10	37.95	43.12	37.65	42.42	30827200	41.22
11/1/10	37.61	41.34	36.83	37.4	37815300	36.34
10/1/10	38.34	40.72	36.21	37.63	46145300	36.57
9/1/10	36.74	41.5	36.66	38.06	36763200	36.94
8/2/10	40.98	41.7	35.55	36.36	34464200	35.29
7/1/10	36.54	41.24	35.16	40.28	40895800	39.09
6/1/10	39.32	39.96	36.51	36.61	45953900	35.48
5/3/10	42.97	43.73	37.02	39.58	58929200	38.36
4/1/10	45.03	48.2	42.23	42.58	47705200	41.27
3/1/10	42.03	46.05	41.34	44.75	34545400	43.32
2/1/10	39.1	42.31	37.03	41.97	49681900	40.63
1/4/10	41.79	45.19	38.07	38.94	56985000	37.7
12/1/09	42.61	43.09	40.04	41.67	35273800	40.29
11/2/09	42.18	44.99	40.75	42.49	34144700	41.09
10/1/09	43.4	47.47	40.53	41.77	41631800	40.39
9/1/09	43.08	46.5	40.75	43.82	35768700	42.32
8/3/09	39.12	44.24	38.99	43.46	42084800	41.97
7/1/09	34.27	39.47	31.59	38.65	51023000	37.33
6/1/09	37.4	37.73	32.18	34.11	66293200	32.9
5/1/09	32.85	38.94	32.06	36.9	80175600	35.59
4/1/09	25.29	35.21	25.29	33	105136100	31.82
3/2/09	21.7	29.6	14.96	26.58	131367700	25.59
2/2/09	25	27.97	18.75	22.85	96059900	22
1/2/09	31.19	31.64	17.7	25.51	82295000	24.56
12/1/08	30.67	37.7	24.61	31.53	53642600	29.99
11/3/08	41.25	42.5	19.69	31.66	76786200	30.11



Data: "S&P 500"

Date	Open	High	Low	Close	Volume	Adj Close
12/1/11	1246.91	1269.37	1202.37	1257.6	3667346600	1257.6
11/1/11	1251	1277.55	1158.66	1246.96	4287457600	1246.96
10/3/11	1131.21	1292.66	1074.77	1253.3	4874946600	1253.3
9/1/11	1219.12	1229.29	1114.22	1131.42	5104933800	1131.42
8/1/11	1292.59	1307.38	1101.54	1218.89	4942913400	1218.89
7/1/11	1320.64	1356.48	1282.86	1292.28	4308168000	1292.28
6/1/11	1345.2	1345.2	1258.07	1320.64	4105601300	1320.64
5/2/11	1365.21	1370.58	1311.8	1345.2	4114534200	1345.2
4/1/11	1329.48	1364.56	1294.7	1363.61	4042194000	1363.61
3/1/11	1328.64	1332.28	1249.05	1325.83	4046691700	1325.83
2/1/11	1289.14	1344.07	1289.14	1327.22	3225297300	1327.22
1/3/11	1257.62	1302.67	1257.62	1286.12	4816605000	1286.12
12/1/10	1186.6	1262.6	1186.6	1257.64	3762922700	1257.64
11/1/10	1185.71	1227.08	1173	1180.55	4354084200	1180.55
10/1/10	1143.49	1196.14	1131.87	1183.26	4432102300	1183.26
9/1/10	1049.72	1157.16	1049.72	1141.2	3993981400	1141.2
8/2/10	1107.53	1129.24	1039.7	1049.33	4044967700	1049.33
7/1/10	1031.1	1120.95	1010.91	1101.6	4704026600	1101.6
6/1/10	1087.3	1131.23	1028.33	1030.71	5235174000	1030.71
5/3/10	1188.58	1205.13	1040.78	1089.41	6626699400	1089.41
4/1/10	1171.23	1219.8	1170.69	1186.69	5847150900	1186.69
3/1/10	1105.36	1180.69	1105.36	1169.43	4702951700	1169.43
2/1/10	1073.89	1112.42	1044.5	1104.49	4658238400	1104.49
1/4/10	1116.56	1150.45	1071.59	1073.87	5071601500	1073.87
12/1/09	1098.89	1130.38	1085.89	1115.1	4163287200	1115.1
11/2/09	1036.18	1113.69	1029.38	1095.63	4443852500	1095.63
10/1/09	1054.91	1101.36	1019.95	1036.19	5451064000	1036.19
9/1/09	1019.52	1080.15	991.97	1057.08	5633064200	1057.08
8/3/09	990.22	1039.47	978.51	1020.62	5764944200	1020.62
7/1/09	920.82	996.68	869.32	987.48	5080675400	987.48
6/1/09	923.26	956.23	888.86	919.32	5330941800	919.32

5/1/09	872.74	930.17	866.1	919.14	6883268000	919.14
4/1/09	793.59	888.7	783.32	872.81	6938945600	872.81
3/2/09	729.57	832.98	666.79	797.87	7633306300	797.87
2/2/09	823.09	875.01	734.52	735.09	7022036200	735.09
1/2/09	902.99	943.85	804.3	825.88	5844561500	825.88
12/1/08	888.61	918.85	815.69	903.25	5320791300	903.25
11/3/08	968.67	1007.51	741.02	896.24	6231635200	896.24
10/1/08	1164.17	1167.03	839.8	968.75	7226593900	968.75
9/2/08	1287.83	1303.04	1106.42	1166.36	6900428500	1166.36
8/1/08	1269.42	1313.15	1247.45	1282.83	4264482300	1282.83
7/1/08	1276.69	1292.17	1200.44	1267.38	5923937200	1267.38



Important statistic keys of the S&P 500 and JPM (adj close):

	JPM	S&P 500
Mean	38.63	1210.65
Standard deviation	5.54	205.43

Using a excel spreadsheet, we calculated also the correlation between the evolution of the JPM index and the S&P 500 portfolio.

Correlation=0.72

The correlation is close to 1, so the evolution of the JPM index and the S&P 500 index is very significant during the 2007-2011 period. We can see this significant correlation on the charts of the adjusted close of PMJ index and the S&P 500 since the variation of both indexes is the very similar. We notice also the peak of the economic and financial crisis in the year 2009, the biggest decline of both indexes in the chose period following the Subprime crisis.

Conclusion:

JP Morgan Chase & co is a leading global financial services firm with assets of $2.2 trillion and operations in more than 60 countries. The firm is a leader in investment banking, financial services for consumers, small business and commercial banking, financial transaction processing, asset management, and private equity. However in 2008 this giant of finance has seen its results fall from $2.3 billion in 2007 to $702 million in 2008. Contagion has affected JP Morgan who owned risky securities. Yet JP Morgan & Chase was one of the banks that have best lived the crisis. From 2009 onwards the results are starting to rebound as it goes from $702 million in 2008 to $3.3 billion in 2009. These good results obtained in the middle of the storm are evidence of the strength of JP Morgan & Chase.