

# Credit Analysis

# Moody's Global Sovereign

November 2008

## Poland

### Table of Contents:

<b>Summary and Outlook</b>	<b>1</b>
<b>Poland's economic convergence may begin to catch up to other countries in the region</b>	<b>2</b>
<b>Poland's institutions have noticeably strengthened</b>	<b>4</b>
<b>Moderate debt burden with benign structure</b>	<b>5</b>
<b>Global liquidity problems should not destabilise economy and banking sector</b>	<b>6</b>
<b>Rating History</b>	<b>8</b>
<b>Sovereign Rating Mechanics</b>	<b>9</b>
<b>Moody's Related Research</b>	<b>12</b>

Poland	Foreign Currency	Local Currency
Government Bond Rating	A2-Stable	A2-Stable
Country Ceiling	Aa1-Stable	Aaa-Stable
Bank Deposit Ceiling	A2-Stable	Aaa-Stable

### Summary and Outlook

Poland's A2 foreign and local currency bond ratings are based upon the country's high economic and institutional strength. Even though GDP per capita is lower than the other Central European countries, the economy is significantly larger than most other countries in the region, facilitating an important degree of stability and diversification. Economic growth has been hampered by the slow pace of structural reform, especially in the labor market and industrial restructuring, but ongoing integration into the broader European economy should ensure a moderate pace of real income convergence with the Eurozone over the medium-term. Monetary policy is disciplined. Inflation expectations are now low and should help anchor inflation despite high global food and energy prices. Poland may enter ERM2 as early as March 2009, with a newly-set target date for euro adoption of 2011. Moody's would view euro adoption as a positive, but it is unlikely to have a direct impact on the government's ratings.

The government's financial strength, set at high, balances a mediocre fiscal performance with the benign structure of government debt. Fiscal outcomes have improved modestly, but the emphasis has been on increasing revenue. Expenditure restraint has been lax, so budget outcomes have been sub-par despite a stronger economy and robust revenue growth. Poland's debt metrics are on the high side compared to most other new EU members and other countries in the same ratings category (A1-A3). Nevertheless, most of the debt is denominated in local currency at fixed rates with long maturities, and there are legislated rules in place designed to maintain the debt/GDP ratio below the Maastricht criteria of 60%.

### Analyst Contacts:

**London** 44.20.7772.5566

**Kenneth Orchard**

*Vice President/Senior Analyst*

**New York** 1.212.553.1653

**Kristin Lindow**

*Senior Vice President*



**Moody's Investors Service**

## Poland

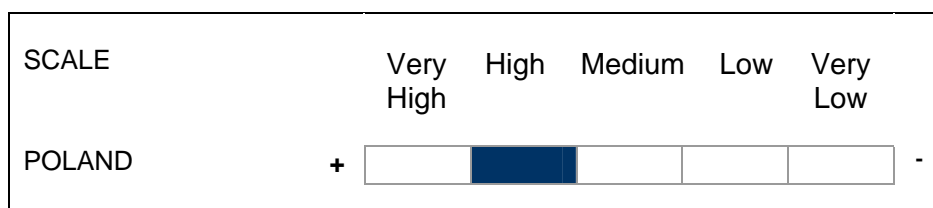
Susceptibility to event risk is assessed at low. Poland's external position is relatively stable, and the economy is less dependent on external debt capital than most other countries in the region. The current account deficit widened but has been well covered by FDI to date. The external debt burden, as measured by external debt/current account receipts, has been steady as exports grew quickly.

The outlooks on Poland's A2 government bond ratings and Aa1 foreign currency bond ceiling are stable. The economy and government finances are likely to be negatively affected by the global liquidity crisis but the impact is expected to be only temporary. Enduring prospects for broad-based economic growth – increasing economic strength – coupled with the increased probability of euro adoption, which would reduce susceptibility to event risk, support the stable rating outlook.

Given the scale of Poland's economy and lesser imbalances, Moody's considers that Poland's ratings are well-positioned versus peers. Indeed, there is a possibility that the government could emerge from the global liquidity crisis in a relatively stronger position than many other countries in the region, suggesting some modest upside potential exists to the current rating over the medium-term.

## Poland's economic convergence may begin to catch up to other countries in the region

### Factor 1 – Economic Strength: High



Poland's economic convergence slightly lagged other countries in the region both prior to and following EU accession in 2004. Over the ten-year period ending in 2007, Poland's real GDP growth expanded, on average, at 4.1% per annum, placing the economy in sixth place out of the CEE-8<sup>1</sup>, slightly ahead of only Hungary and Czech Republic.

The main reason for Poland's regional underperformance was the exceptionally rapid growth in the Baltic states over the period, still, convergence has also been underwhelming compared to the Visegrad economies<sup>2</sup> and Slovenia. Despite having the lowest average income in the group, Poland has made little progress in closing the gap. In 1998, Poland's GDP per capita (measured in PPP<sup>3</sup> terms) was approximately \$9,000<sup>4</sup>, or 76% of the Visegrad plus Slovenia average at the time. By 2006<sup>5</sup>, GDP per capita had risen 64% to \$14,800, but the relative value remained unchanged.

On a global scale, Poland is a solid upper-middle income country, ranking in the 58th percentile in Moody's rating universe. Other countries at similar level of economic development include Croatia (rated Baa3), Russia (Baa1), Chile (A2), Malaysia (A3), and Trinidad & Tobago (Baa1).

Although Poland's relative level of development suggests that its economic strength should be 'medium', Moody's classifies its strength at 'high' due to the scale of the economy. Moody's estimates that nominal GDP will be almost €400 billion in 2008, which is about the same size as Sweden (Aaa), Switzerland (Aaa), Belgium (Aa1) or the Netherlands (Aaa), and significantly larger than any of the other new EU members. Larger economies tend to be more diversified and have a greater base of domestic demand, reducing volatility and vulnerability to shocks.

<sup>1</sup> CEE: Central and Eastern Europe. CEE-8: Poland, Hungary, Czech Republic, Slovakia, Slovenia, Estonia, Lithuania and Latvia

<sup>2</sup> Poland, Hungary, Czech Republic and Slovakia.

<sup>3</sup> Purchasing Power Parity.

<sup>4</sup> As measured by the World Bank.

<sup>5</sup> Most recent available data.

## Poland

The large size of Poland's economy is one of the key reasons for Poland's economic underperformance over the past ten years. External demand for exports and externally-driven financial inflows were the two major drivers of economic growth in CEE during the most recent cycle. As a less open economy<sup>6</sup>, external factors had less impact on Poland than on other countries in the region. This can be seen in the different levels of current account deficits. Whereas Poland's current account deficit averaged 3.0% of GDP in 2003-2007, Hungary's deficit averaged 6.8%, Slovakia's averaged 5.2%, and the Baltic states and Bulgaria both averaged about 13%.

The other side of large current account deficits in CEE was large capital inflows into the banking systems as foreign-owned banks expanded aggressively. In response, domestic/GDP ratios tended to increase significantly. Although Poland's ratio – 47% at end-2007 – was up from about 36% in 2005, it still remains the second-lowest in the region (after Romania).

Yet Poland's economic performance has lagged for other reasons, too. The labour market is inflexible and the labour force participation rate is the lowest in the European Union, partially due to policies that encourage early retirement<sup>7</sup>. Structural reform has been slower than many other countries, and much of the old industry is inefficient and needs to be restructured (the shipyards being a high profile example). But although Poland was once a leader in privatisation and restructuring, the government's appetite for such policies has severely diminished.

Equally important is the relatively low level of investment spending. The investment/GDP ratio averaged about 22% during 1998-2007, the lowest level in the CEE-8. In contrast to neighbouring countries, Poland has invested little in its major transport infrastructure (especially motorways), even though it is one of the larger countries in the region and it borders on seven other countries. EU structural funds should provide support in this area but have yet to start flowing in meaningful amounts due to problems with systems and processes<sup>8</sup>.

Nevertheless, Poland now has the opportunity to turn its previous weaknesses into strengths. Indeed, Moody's believes that Poland's economic convergence may finally begin to catch up to other countries in the region. As others have faltered (e.g. the Baltics, Hungary), Poland's economy has shown a stronger performance over the past year. GDP growth has been robust and employment has increased, attracting back some of the large numbers of Poles that moved abroad in the past.

In spite of the past year's performance, it will be impossible for Poland to avoid the effects of the current global liquidity crisis and looming global recession. Exports will be negatively impacted and external liquidity will decline, putting pressure on interest rates and asset prices. The most recent "senior loan officer" opinion survey<sup>9</sup> showed that banks are continuing to tighten lending standards and that demand for loans is declining. Economic growth is certain to be weak in such an environment. But the smaller level of economic imbalances and greater reliance on domestic demand should also mitigate the worst effects and allow the country to evade a major economic downturn.

EU membership should enhance long-term growth potential. EU structural funds should finally begin to flow into the country in material amounts in 2009. These funds, which could reach 2%-3% of GDP annually over the next few years<sup>10</sup>, can be used to increase investment in infrastructure, science, education and other areas important for economic development. There are signs that the political, legal and bureaucratic issues that have been holding up major road building are finally being resolved. As the investment rate rises to closer to the regional average, there should be positive spillover effects into the broader economy. Foreign investors should also come to appreciate the country's relative economic stability vis-à-vis many of the other lower-cost EU members.

<sup>6</sup> The 'openness' of Poland's economy (sum of exports + imports as a share of GDP) was 84% in 2007; the only other new EU member with the same ratio below 100% was Romania.

<sup>7</sup> There is currently legislation before the senate that would limit early retirement benefits for a broad swath of workers, but it is uncertain if the president will veto the measure.

<sup>8</sup> This should be resolved for 2009.

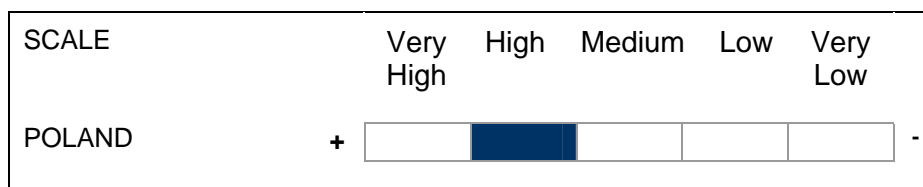
<sup>9</sup> Published by the National Bank of Poland at [http://www.nbp.pl/en/SystemFinansowy/kredytowy4\\_2008\\_en.pdf](http://www.nbp.pl/en/SystemFinansowy/kredytowy4_2008_en.pdf)

<sup>10</sup> The actual amount will depend upon governments' ability to allocate and utilise the funds effectively.

## Poland

## Poland's institutions have noticeably strengthened

### Factor 2 – Institutional Strength: High



Moody's starting point for assessing a country's institutional strength is typically the Worldwide Governance Indicators, compiled and published by the World Bank Institute. On this basis, Poland's institutional strength should be set at 'medium'. Poland's score on the government effectiveness and rule of law indices place the country in the 53rd and 50th percentiles respectively, below all of the other CEE-8 countries. Globally, Poland's scores place the country at about the same level as Oman (A2), Trinidad & Tobago (Baa1), Tunisia (Baa2), Italy (Aa2), Croatia (Baa3) and Costa Rica (Ba1).

However, Moody's believes that Poland's institutional strength is, in fact, greater than the World Bank's indicators suggest. Poland's institutional strength has been assessed at high, based on a noticeable improvement in the quality of governance in recent years. Policies have become much more stable and predictable, despite a somewhat noisy political environment.

EU membership is an important part of this assessment. As with all other new EU members, the adoption and implementation of the *acquis communautaire*, technical assistance and funding for public sector reform facilitated a radical overhaul of the country's institutions. EU membership also facilitates implementation of best practices through constant interaction and dialogue with practitioners and policymakers.

There has been a subtle transformation in the macroeconomic policy context, with a greater emphasis on long-term stability and growth. Fiscal policy has been a moderate success. Some limited budgetary reforms, prudent fiscal management and the strong economy reduced the budget deficit to 2.0% of GDP in 2007 from a peak of 6.3% of GDP in 2003, allowing the European Commission to remove Poland from the excessive deficit procedure in July 2008.

However, Poland's fiscal policy is not entirely 'out of the woods'. Most of the fiscal reform achieved to-date has been on the revenue side, leaving a somewhat bloated public sector that requires high taxes to maintain. The Civic Platform (PO)-led government that came into office in late-2007 has not pushed as much as expected for budgetary reform. Reform efforts have been stymied by resistance from coalition partners and poor relations with the Polish President, who can veto legislation. There is also a strong possibility that the Prime Minister, Donald Tusk, will be reluctant to undertake unpopular measures ahead of presidential elections in 2010, in which he is expected to run as a candidate.

The National Bank of Poland moved to an inflation targeting strategy in 1999. Disciplined monetary policy has kept inflation in check, in spite of the spike in global energy and food prices earlier this year. The Prime Minister has recently launched a campaign to join the eurozone in 2011. Moody's believes that euro adoption in 2011-12 is possible but both politically and economically ambitious. Although inflation is expected to decline over the next twelve to eighteen months, there is likely to be persistent upward pressure on Polish inflation over the medium term due to the large differential in price levels with the older EU members.

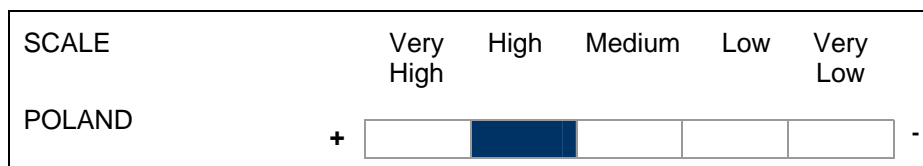
It is also likely that Poland will need to implement constitutional changes before European Monetary Union entry to transfer the right to print money and conduct monetary policy to European Central Bank from the National Bank of Poland. Changing the constitution would be very difficult in the current environment, as the major opposition party and president are opposed and are calling for a referendum on the subject<sup>11</sup>. In the meantime, Poland will need to negotiate ERM2 entry in early 2009 if it is to meet the two-year requirement to qualify for EMU membership.

<sup>11</sup> Recent polls show a slim majority in favour of euro adoption.

## Poland

## Moderate debt burden with benign structure

## Factor 3 – Government Financial Strength: High



The Government of Poland's financial strength is judged to be high. Interest/revenues, the best measure of debt affordability, will be approximately 6.3% in 2008, well above the CEE-8 average of 3.7%, but approximately at the eurozone average. An important reason why the ratio is higher is that most of the government's debt is denominated in local currency and therefore is at zloty interest rates. If the government is successful in its bid to adopt the euro in 2011, the cost of the debt should decline as debt is refinanced in euros.

Debt ratios have declined slightly over the past few years as the fiscal situation was brought under greater control, but are still well above its peers. Debt/GDP and debt/revenue, forecast at 44% and 111% respectively for end-2008, are higher than the CEE-8 averages of 28% and 71%. Within that group, Hungary is the only country with higher debt ratios, while the Baltic states have the lowest ratios. Looking at other A2-rated countries around the world, Botswana has debt/GDP and debt/revenue ratios of 5% and 15%, Chile of 3% and 11%, Korea of 32% and 123%, and Oman of 5% and 9% respectively.

Constitutional safeguards are in place to prevent debt/GDP from exceeding the 60% Maastricht criterion. The safeguards are designed to ensure that draft budgets become progressively more stringent as the debt ratio approaches the 60% threshold. Furthermore, if the 60% threshold should be breached, all government borrowing is forbidden the following year, effectively placing an upper limit on the government's indebtedness.

The structure of the government's debt is benign. Approximately two-thirds of the total is denominated in local currency, insulating the government from currency risk, and almost 90% is at fixed interest rates. Rollover risk is also not a serious concern as slightly over 60% of foreign debt has a residual maturity above five years and the average term-to-maturity of the domestic debt has been gradually increasing and is now over four years. About 50% of domestic debt will mature in the next three years, but the domestic market has become sufficiently deep and stable that refinancing should not present any serious problems. The proportion of domestic government debt held by local investors has been rising since 2005, reaching about 83% in June 2008<sup>12</sup>.

Moody's expects the government's debt burden to remain roughly stable over the medium term. There is likely to be some upward pressure on the budget deficit and debt ratios over the next one to two years as the economy slows in response to the global liquidity crisis. Post-recovery, debt ratios should resume their downward trend, assuming that fiscal prudence is maintained.

There is a small possibility that the government could be forced to explicitly assume some contingent liabilities from weak entities or emerging stress in the financial system. PKN Orlen and PGNiG, the two major energy companies in which the government owns shares, together have gross liabilities of about 2.5% of GDP. The Gdynia and Szczecin shipyards are high profile cases where the state would like to contribute additional funds, but the European Commission has ordered that previous aid (€2.3 billion) was illegal and it may have to be re-paid.

Polish banks could also come under acute pressure – as they have in other countries around the world – and require additional funds to repair capital or improve liquidity. Fresh capital would almost certainly be provided by foreign parent banks in the first instance where applicable, but it is difficult to precisely forecast how actors will behave in a crisis situation. The second-largest bank, PKO (51.5% owned by the government), has liabilities of approximately 8% of GDP<sup>13</sup>, but this ignores the large stock of assets held against those liabilities. In a major banking crisis (not the central case), Moody's calculates that the total net cost to government would be in the range of 3% of GDP<sup>14</sup>.

<sup>12</sup> Compared to less than 60% in Hungary.

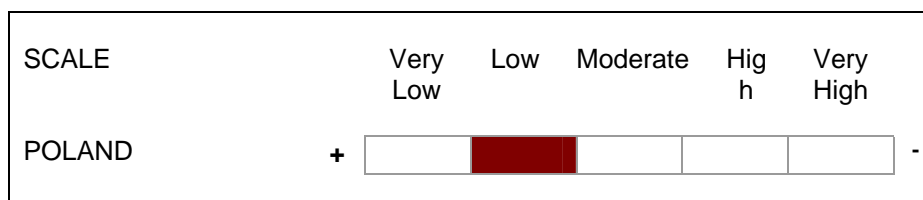
<sup>13</sup> Includes deposits but excludes tax and other public sector liabilities.

<sup>14</sup> *When macroeconomic tensions result in rating changes: how vulnerable are emerging European Sovereigns?*, May 2008.

## Poland

## Global liquidity problems should not destabilise economy and banking sector

### Factor 4 – Susceptibility to Event Risk: Low



Poland's susceptibility to political, economic and financial event risk is rated low. This compares to very low event risk in the Czech Republic and Slovakia and moderate event risk in the Baltic states and Hungary. Other countries in the world with low event risk include Belgium, Botswana, Hong Kong, Mexico and Tunisia.

As discussed above, Poland's political situation is sometimes noisy, but the impact on policy and the real economy has been limited.

Implicit in Moody's assessment of low economic and financial risk is the assumption that the current global liquidity problems will not destabilise the economy and banking sector. Imbalances in the Polish economy have increased over the past few years, but overall the levels have remained reasonable compared to its peers. The current account deficit averaged 3.0% of GDP in 2003-07, versus 3.8% in Czech Republic, 5.2% in Slovakia, 6.8% in Hungary and 9% in Lithuania<sup>15</sup>. External debt/current account receipts, on the other hand, was 115% at end-2007, well above Czech Republic (50%) and Slovakia (64%), at about the same level as Hungary (122%) and Lithuania (117%), but below Estonia (133%).

The balance of payments is not expected to come under concerted pressure. The proportion of short-term external debt in the total was about 31% in June 2008, but much of this is bank debt and intercompany lending owed to foreign parents that should be relatively immune to re-financing risk. The central bank's official mandate is price stability, and in this context, it reserves the right to intervene in the foreign exchange market as and when necessary. As of the end of September 2008 it held €41.4 billion that could be used for this purpose, equating to approximately 100% of short-term external debt or three months of goods and services imports.

If Poland experienced concerted balance of payments pressure, it could call on the resources of the International Monetary Fund (IMF) and EU. Presumably, Poland would have access to the IMF's new Short-term Liquidity Facility<sup>16</sup>, under which it could borrow up to 500% of the country's IMF quota, equivalent to about €7.9 billion. The size of potential EU resources is less certain, but the recent financial package for Hungary has made it clear that EU members have access to significant emergency resources. The EU's emergency balance of payments fund was recently expanded to €25 billion and, as the largest new member state, Poland would presumably be eligible for a sizeable proportion of the total. Swap lines with the European Central Bank could also be arranged; Hungary recently obtained a €5 billion ECB swap line even though, like Poland, it is not a member of the EMU.

<sup>15</sup> The average current account deficits over the same period for Estonia and Latvia were 13.6% and 16%, respectively.

<sup>16</sup> The new IMF facility is available to those governments recognized as having sound economic policy frameworks, since it is granted without conditionality.



## Poland

The banking system appears to be sufficiently strong to weather the global crisis, as long as the crisis does not persist for an extended period of time. At about 11%<sup>17</sup>, the aggregate capital adequacy ratio is above the norm in most advanced highly developed countries, but slightly lower than most other countries in CEE. Profitability has been strong but this will likely decline quickly as the economy weakens. Domestic credit approximately doubled over the past five years (in nominal terms). Even though this growth rate was below many other countries in the region, and regulations were gradually tightened<sup>18</sup>, there is typically an amount of low-quality lending during credit booms that does not come to light until the economic environment sours.

One area of concern is the high proportion (52%) of mortgages denominated in Swiss francs (CHF). If the relative strength of CHF versus the zloty continues, banks are likely to experience rising distress amongst clients that have borrowed in this manner. Given the current state of the international financial markets, however, it appears likely that banks will have considerable difficulty refinancing CHF mortgage pools, and therefore CHF denominated lending seems likely to gradually fade away as existing mortgages mature.

The banking system is two-thirds foreign-owned; the second-largest bank (PKO) is locally-owned (and majority-owned by the government). Given the size and potential growth prospects of the Polish market, most – if not all – international banks active in the country view their operations as strategic and long term. Therefore, it is assumed that, if additional capital is required, foreign banks would make the necessary contributions and would not abandon their subsidiaries. In the unlikely event that such a scenario should occur, however, Moody's believes that the Polish government would be quick to step in and support banks in order to prevent a disorderly situation, just as governments have done already in a number of other European countries.

<sup>17</sup> As of June 2008.

<sup>18</sup> Particularly in 2006 with the publication of Regulation S – concerning good practice with regard to mortgage-secured credit exposures.

## Poland

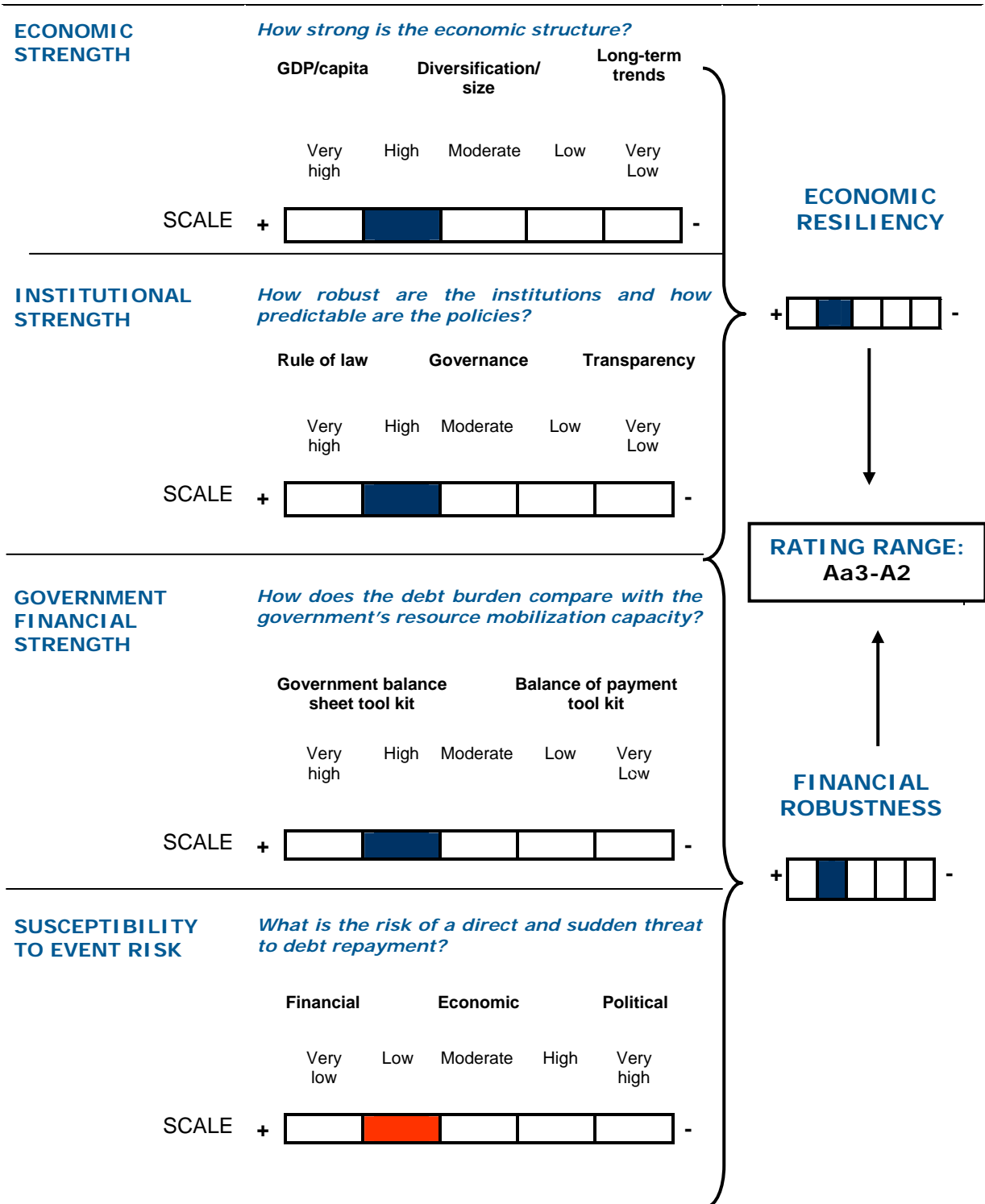
## Rating History

	Foreign Currency Ceilings				Government Bonds		Outlook	Date
	Bonds & Notes		Bank Deposit		Foreign Currency	Local Currency		
	Long-term	Short-term	Long-term	Short-term				
Rating Raised	Aa1	--	--	--	--	--	--	May-06
Rating Raised	A2	P-1	A2	P-1	A2	--	--	November-02
Rating Assigned	--	P-2	--	--	--	--	--	September-99
Rating Raised	Baa1	P-2	Baa1	P-2	Baa1	--	Stable	September-99
Outlook Changed	--	--	--	--	--	--	Positive	December-98
Rating Assigned	--	--	--	--	--	A2	--	June-98
Outlook Assigned	--	--	--	--	--	--	Stable	March-97
Rating Assigned	--	--	Ba1	NP	--	--	--	October-95
Rating Assigned	Baa3	--	--	--	Baa3	--	--	June-95



Poland

### Sovereign Rating Mechanics



## Poland

## Poland

	2002	2003	2004	2005	2006	2007	2008F	2009F
<b>Economic Structure and Performance</b>								
Nominal GDP (US\$, Bil.)	198.2	216.8	252.8	303.9	341.6	421.9	524.4	554.7
Population (Mil.)	38.2	38.2	38.2	38.2	38.1	38.1	38.1	38.1
GDP per capita (US\$)	5,184	5,676	6,620	7,963	8,960	11,072	13,771	14,575
GDP per capita (PPP basis, US\$)	11,014	11,694	12,673	13,535	14,836	--	--	--
Nominal GDP (% change, local currency)	3.7	4.3	9.7	6.4	7.8	10.1	8.7	7.1
Real GDP (% change)	1.4	3.9	5.3	3.6	6.2	6.6	5.4	2.3
Inflation (CPI, % change Dec/Dec)	0.8	1.7	4.4	0.7	1.4	4.0	4.3	3.2
Gross Investment/GDP	18.6	18.7	20.1	19.3	20.8	23.8	24.4	25.1
Gross Domestic Savings/GDP	15.2	16.2	18.1	18.9	20.0	21.1	20.9	20.5
Nominal Exports of G & S (% change, US\$ basis)	10.1	27.3	31.2	18.9	22.1	25.4	17.6	5.8
Nominal Imports of G & S (% change, US\$ basis)	8.6	22.4	28.3	14.0	23.3	31.1	20.6	8.5
Openness of the Economy [1]	60.7	69.2	77.0	74.5	81.4	84.5	81.0	82.1
Government Effectiveness [2]	0.57	0.54	0.44	0.54	0.49	0.38	--	--
<b>Government Finance</b>								
Gen. Gov. Revenue/GDP	39.2	38.4	36.9	39.0	40.0	40.0	39.4	39.7
Gen. Gov. Expenditures/GDP	44.2	44.6	42.6	43.3	43.8	42.0	41.7	42.5
Gen. Gov. Financial Balance/GDP	-5.0	-6.3	-5.7	-4.3	-3.8	-2.0	-2.3	-2.8
Gen. Gov. Primary Balance/GDP	-2.1	-3.3	-2.9	-1.5	-1.1	0.5	0.2	-0.1
Gen. Gov. Debt (US\$ Bil.)	83.63	102.11	115.52	143.14	162.96	189.43	230.20	242.96
Gen. Gov. Debt/GDP	42.2	47.1	45.7	47.1	47.7	44.9	43.9	43.8
Gen. Gov. Debt/Gen. Gov. Revenue	107.7	122.7	123.8	120.8	119.3	112.3	111.4	110.3
Gen. Gov. Int. Pymt/Gen. Gov. Revenue	7.4	7.8	7.6	7.2	6.8	6.0	6.3	6.8
Gen. Gov. FC & FC-indexed Debt/Gen. Gov. Debt	41.1	40.8	39.9	40.9	39.0	36.7	36.0	35.5
<b>External Payments and Debt</b>								
Nominal Exchange Rate (local currency per US\$, Dec)	3.84	3.74	2.99	3.26	2.91	2.44	2.40	2.50
Real Eff. Exchange Rate (% change)	-3.2	-7.5	2.7	8.9	2.1	3.4	--	--
Current Account Balance (US\$ Bil.)	-5.54	-5.47	-10.07	-3.72	-9.39	-20.10	-27.37	-21.65
Current Account Balance/GDP	-2.8	-2.5	-4.0	-1.2	-2.7	-4.8	-5.2	-3.9
External Debt (US\$ Bil.)	84.9	107.3	129.8	132.8	169.6	229.9	262.9	267.7
Public Sector External Debt/Total External Debt	42.2	42.2	44.6	45.8	40.7	38.0	33.6	33.0
Short-term External Debt/Total External Debt	16.3	18.3	19.1	20.3	20.4	25.9	27.3	25.3
External Debt/GDP	40.3	47.6	42.0	44.1	46.6	48.0	49.7	49.2
External Debt/CA Receipts [3]	135.6	135.4	120.7	102.6	106.6	115.3	111.1	101.1
Interest Paid on External Debt (US\$ Bil.)	3.27	3.60	4.07	4.25	5.28	7.08	8.24	9.12
Amortization Paid on External Debt (US\$ Bil.)	9.66	13.58	21.34	30.05	23.39	28.74	31.05	33.37
Net Foreign Direct Investment/GDP	2.0	2.0	4.7	2.3	3.1	4.3	2.7	2.7
Official Foreign Exchange Reserves (US\$ Bil.)	27.96	31.72	34.55	40.49	46.11	62.72	71.00	74.08
Net Foreign Assets of Domestic Banks (US\$ Bil.)	4.66	2.28	11.71	13.23	10.38	-7.32	--	--

## Poland

Poland	2002	2003	2004	2005	2006	2007	2008F	2009F
<b>Monetary, Vulnerability and Liquidity Indicators</b>								
M2 (% change Dec/Dec) [4]	-1.6	5.7	7.5	12.6	15.9	14.2	18.4	--
Short-term Nominal Interest Rate (% per annum, Dec 31) [4]	4.6	3.4	3.5	2.4	2.2	3.4	4.0	--
Domestic Credit (% change Dec/Dec) [4]	0.8	5.2	4.2	13.8	23.0	26.7	23.4	--
Domestic Credit/GDP	34.7	35.0	33.3	35.6	40.6	46.7	--	--
M2/Official Forex Reserves (X)	3.0	2.9	3.6	3.1	3.6	3.6	--	--
Total External Debt/Official Forex Reserves	303.6	338.1	375.7	328.1	367.8	366.6	370.3	361.4
Debt Service Ratio [5]	20.6	21.7	23.6	26.5	18.0	18.0	16.6	16.0
External Vulnerability Indicator [6]	84.2	104.6	133.6	141.0	125.7	140.6	144.7	136.3
Liquidity Ratio [7] [8]	70.1	63.4	35.5	46.7	43.0	56.7	51.9	--
Total Liab. due BIS Banks/Total Assets Held in BIS Banks [8]	150.8	176.0	134.5	162.8	186.2	236.3	221.4	--

**Notes:**

[1] Sum of Exports and Imports of Goods and Services/GDP

[2] Composite index with values from -2.50 to 2.50: higher values suggest greater maturity and responsiveness of government institutions

[3] Current Account Receipts

[4] 2008 as of July

[5] (Interest + Current-Year Repayment of Principal)/Current Account Receipts

[6] (Short-Term External Debt + Currently Maturing Long-Term External Debt + Total Nonresident Deposits Over One Year)/Official Foreign Exchange Reserves

[7] Liabilities to BIS Banks Falling Due Within One Year/Total Assets Held in BIS Banks

[8] 2008 as of March

## Poland

## Moody's Related Research

### Rating Methodology:

- Sovereign Bond Ratings, September 2008 (109490)

### Special Comment:

- When macroeconomic tensions result in rating changes: how vulnerable are EMEA Sovereigns?, May 2008 (109182)

### Banking System Outlook:

- Poland, November 2008 (112355)

*To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.*

Report Number: 112473

Author	Associate Analyst	Senior Production Associate
Kenneth Orchard	Jaime Reusche	David Heston

© Copyright 2008, Moody's Investors Service, Inc. and/or its licensors and affiliates (together, "MOODY'S"). All rights reserved. **ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY COPYRIGHT LAW AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.** All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, such information is provided "as is" without warranty of any kind and MOODY'S, in particular, makes no representation or warranty, express or implied, as to the accuracy, timeliness, completeness, merchantability or fitness for any particular purpose of any such information. Under no circumstances shall MOODY'S have any liability to any person or entity for (a) any loss or damage in whole or in part caused by, resulting from, or relating to, any error (negligent or otherwise) or other circumstance or contingency within or outside the control of MOODY'S or any of its directors, officers, employees or agents in connection with the procurement, collection, compilation, analysis, interpretation, communication, publication or delivery of any such information, or (b) any direct, indirect, special, consequential, compensatory or incidental damages whatsoever (including without limitation, lost profits), even if MOODY'S is advised in advance of the possibility of such damages, resulting from the use of or inability to use, any such information. The credit ratings and financial reporting analysis observations, if any, constituting part of the information contained herein are, and must be construed solely as, statements of opinion and not statements of fact or recommendations to purchase, sell or hold any securities. **NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.** Each rating or other opinion must be weighed solely as one factor in any investment decision made by or on behalf of any user of the information contained herein, and each such user must accordingly make its own study and evaluation of each security and of each issuer and guarantor of, and each provider of credit support for, each security that it may consider purchasing, holding or selling.

MOODY'S hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MOODY'S have, prior to assignment of any rating, agreed to pay to MOODY'S for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,400,000. Moody's Corporation (MCO) and its wholly-owned credit rating agency subsidiary, Moody's Investors Service (MIS), also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually on Moody's website at [www.moody's.com](http://www.moody's.com) under the heading "Shareholder Relations — Corporate Governance — Director and Shareholder Affiliation Policy."



**Moody's Investors Service**