



Construction Sector Survey as of June 2014

Financial Studies Division
Superintendency of Banks of Panama
September 2014

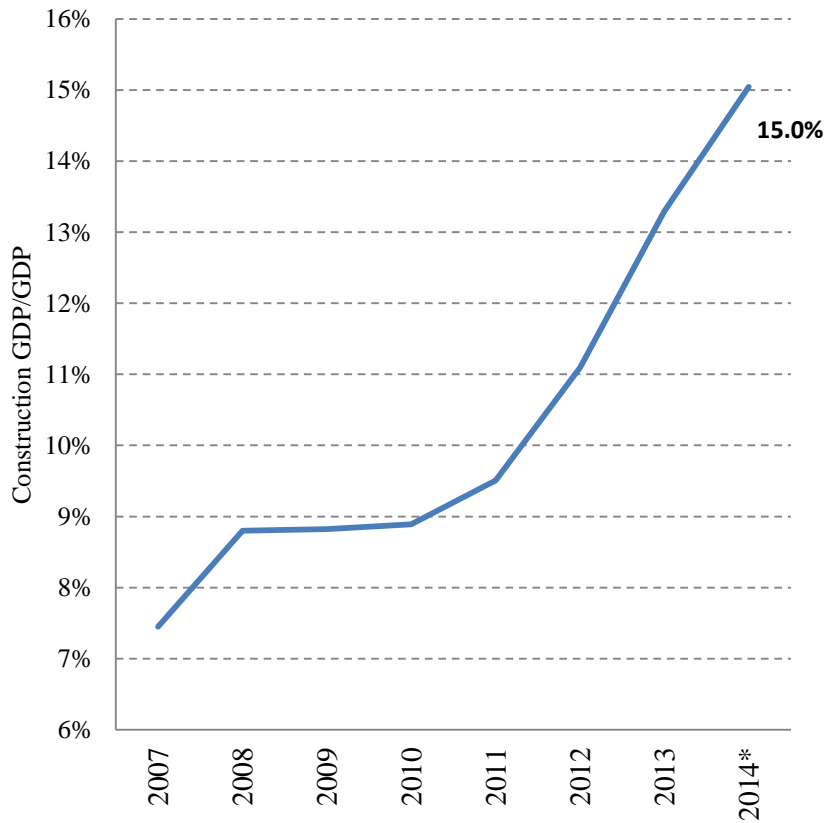
Agenda

- I. Some considerations on the Construction Sector.
- II. Performance of the NBS Construction Sector Portfolio.
- III. Construction Sector Survey Results.
- IV. Appendix.

I. Some considerations on the Construction Sector

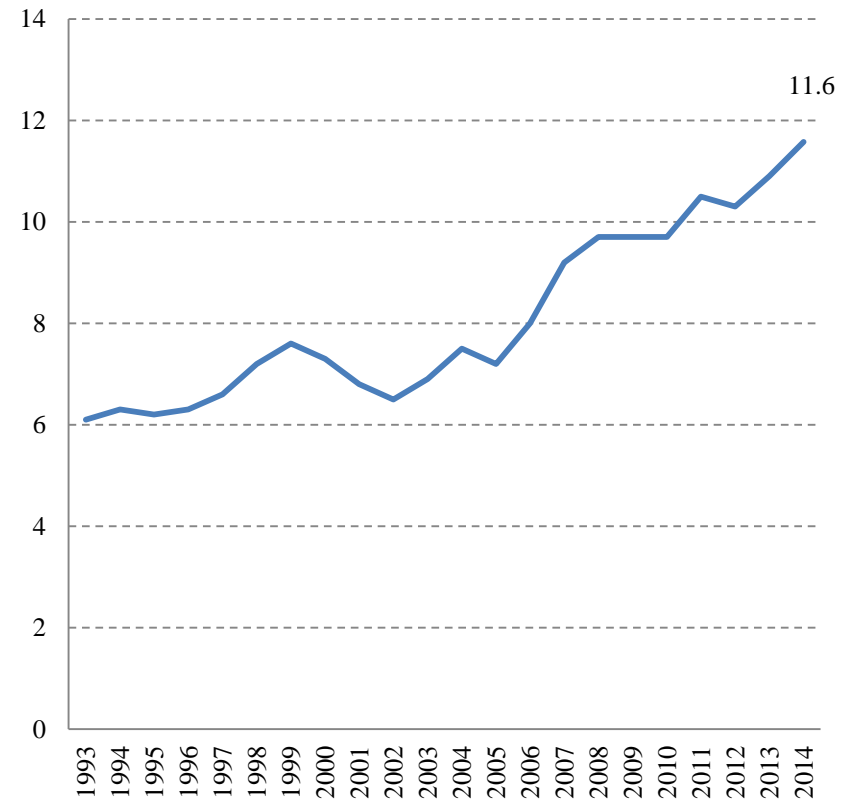
The high growth rate in the construction sector in Panama in recent years has increased its weight in the economy. Consequently, during the first quarter of 2014, construction represented 15% of GDP and 11.6% of employment.

Panama: Construction Weight in the GDP



Source: SBP with NISC data
* Data through 1Q 2014

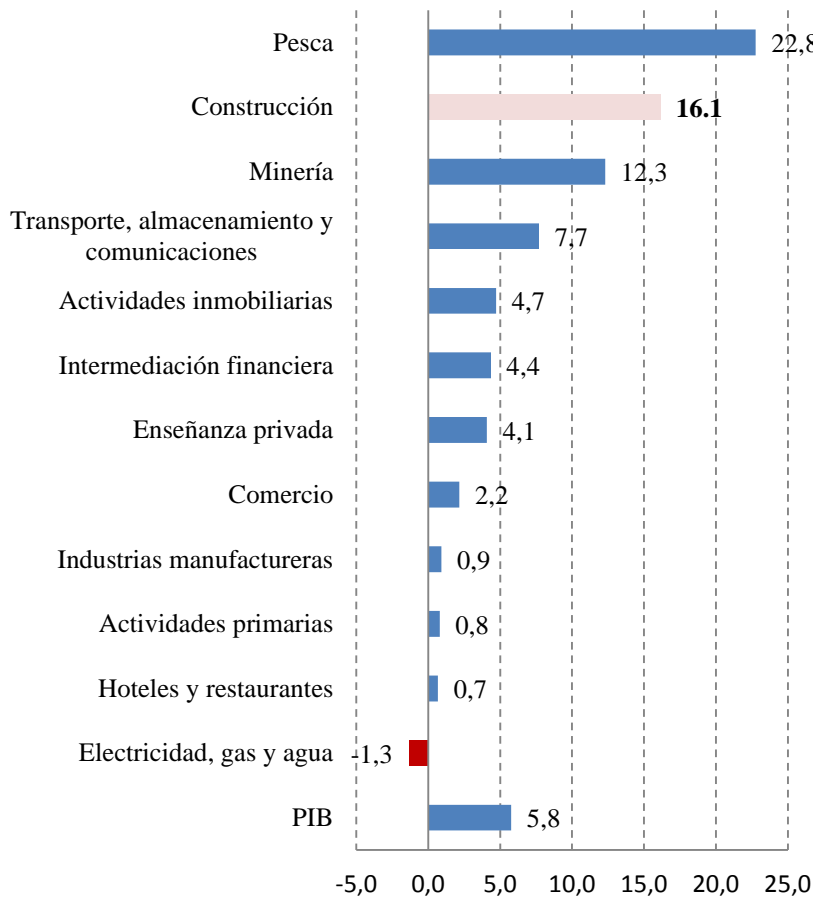
Panama: Construction Weight in Employment



Source: SBP with NISC data

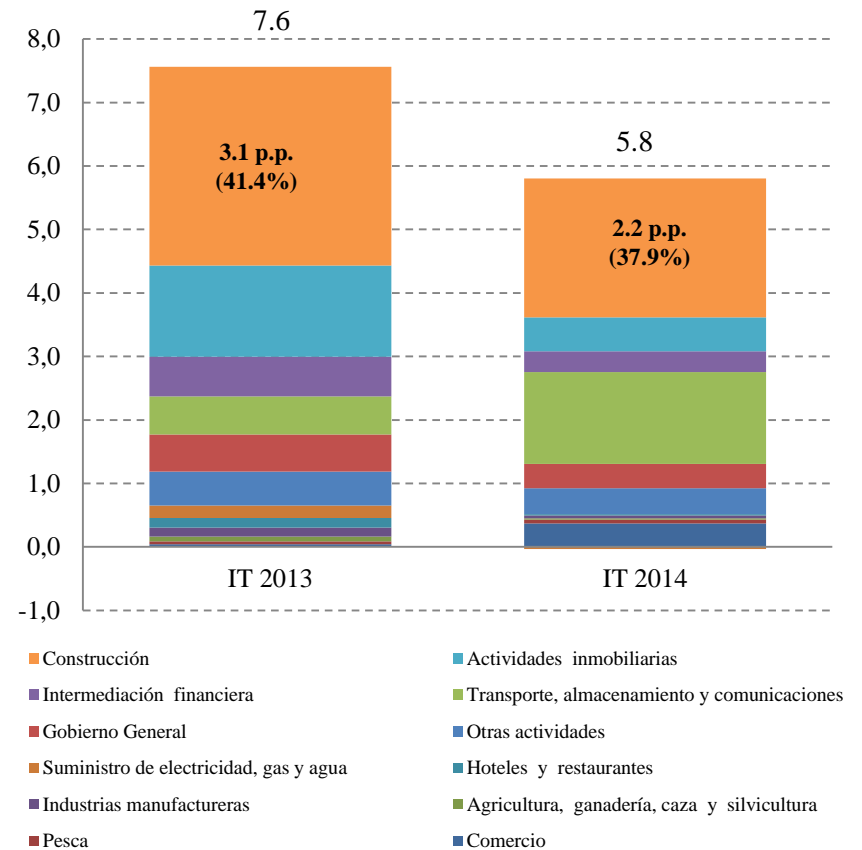
Construction activity (buildings and civil works) has been strong in recent years, becoming one of Panama’s growth engines. Construction was one of the sectors that led supply side growth, growing 16.1%. In the first half of 2014, construction contributed 2.2 percentage points (37.9%) to GDP growth.

GDP Growth – IQ 2014



Source: SBP with NISC data

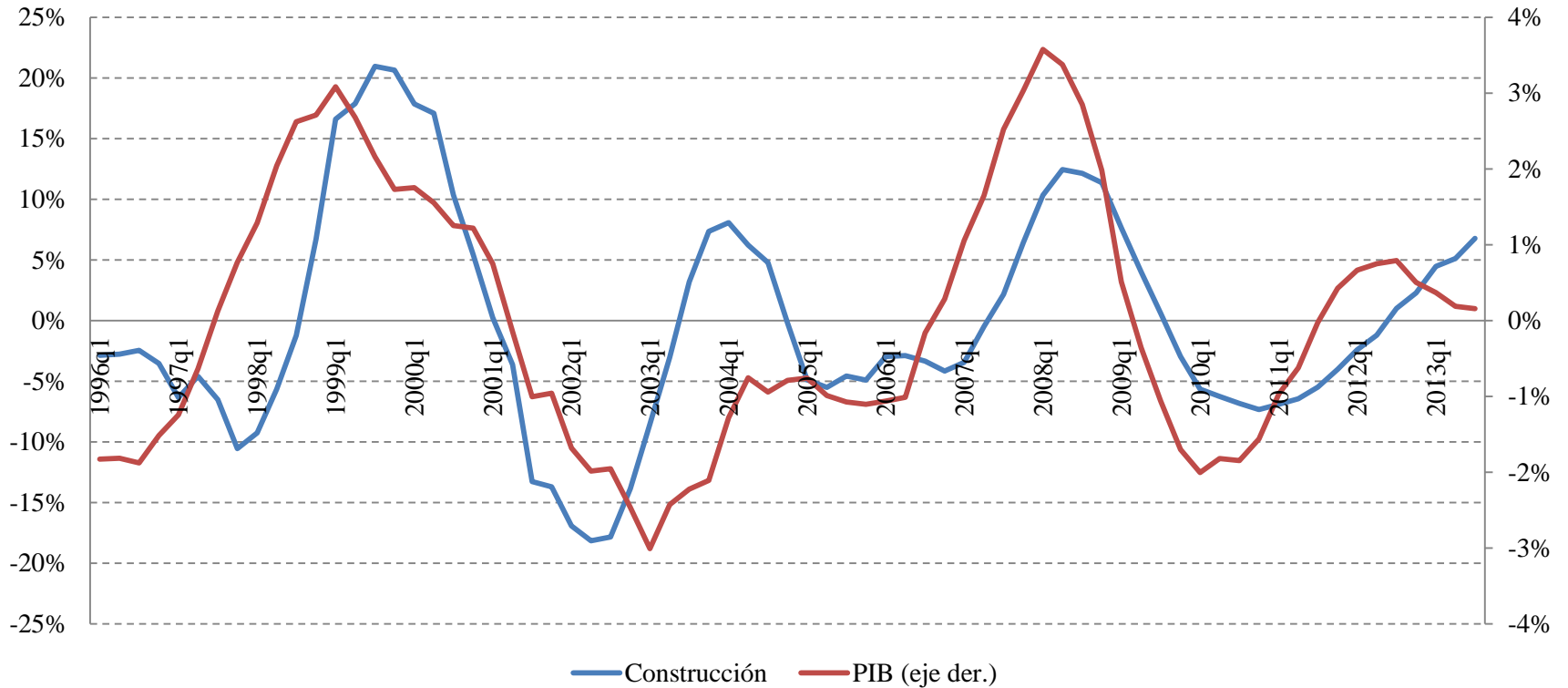
Sector’s contribution to GDP Variation



Source: SBP with NISC data

Certain assumptions observed in the literature on the sector’s behavior are confirmed, especially the volatility of sector activity and the “overreaction” of the sector to the aggregate economic activity cycle. The transfer coefficient between the cycles of global and sector economic activity is analyzed in greater detail below.

Economic Cycles and Sector Cycles*
IQ 1996 – IIIQ 2014



Source: SBP’s Financial Studies Division.

* Cyclic component estimated using a Hodrick and Prescott filter.

The transfer coefficient shows that for each percentage point increase (or decrease) in the economy, the construction sector increases (decreases) by 1.84. This is in line with the findings of the data analysis; i.e. that sector cycles overreact to the economic cycle. How much? Estimates indicate that the sector cycle is on average 84% more pronounced than the aggregate cycle.

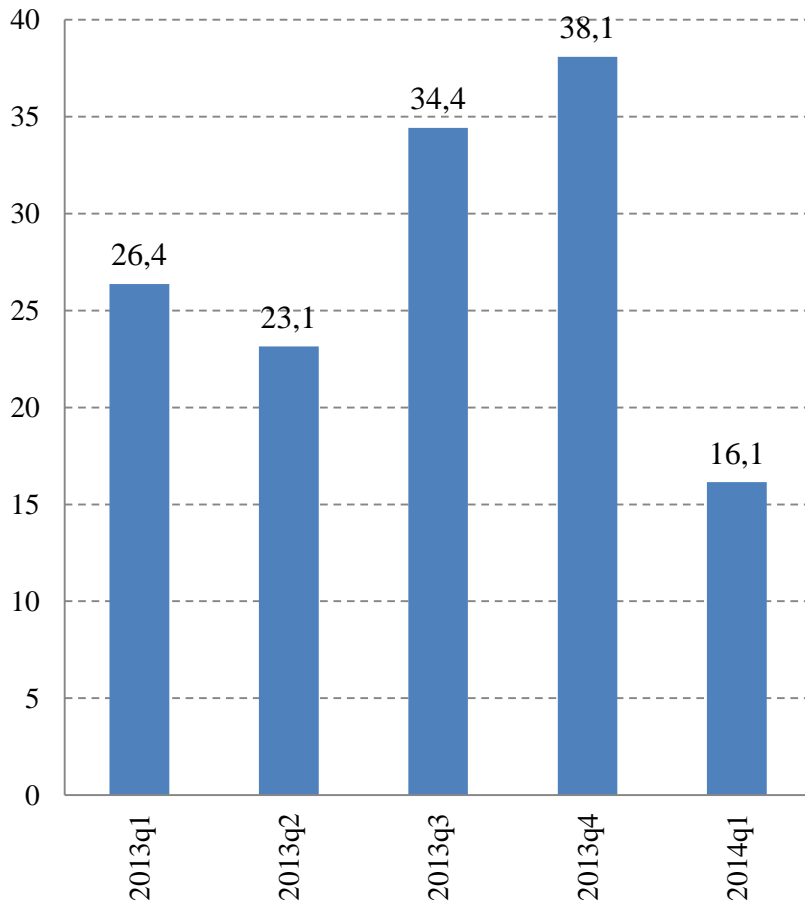
Dependent variable: Log. Construction GDP

Variable	Coefficient	Std. Error	Statistical t	Prob.
Log. GDP	1.84	0.08	22.23	0.00
C	-10.00	0.68	-14.65	0.00
AR(1)	0.47	0.11	4.21	0.00
MA(2)	0.34	0.12	2.83	0.01
R-squared	0.978366	Mean dependent var		5.128572
Adjusted R-squared	0.977383	S.D. dependent var		0.60148
S.E. of regression	0.090457	Akaike info criterion		-1.912441
Sum squared resid	0.540042	Schwarz criterion		-1.783956
Log likelihood	70.93544	Hannan-Quinn criter.		-1.861405
F-statistic	994.9191	Durbin-Watson stat		2.007609
Prob(F-statistic)	0			

Source: SBP's Financial Studies Division

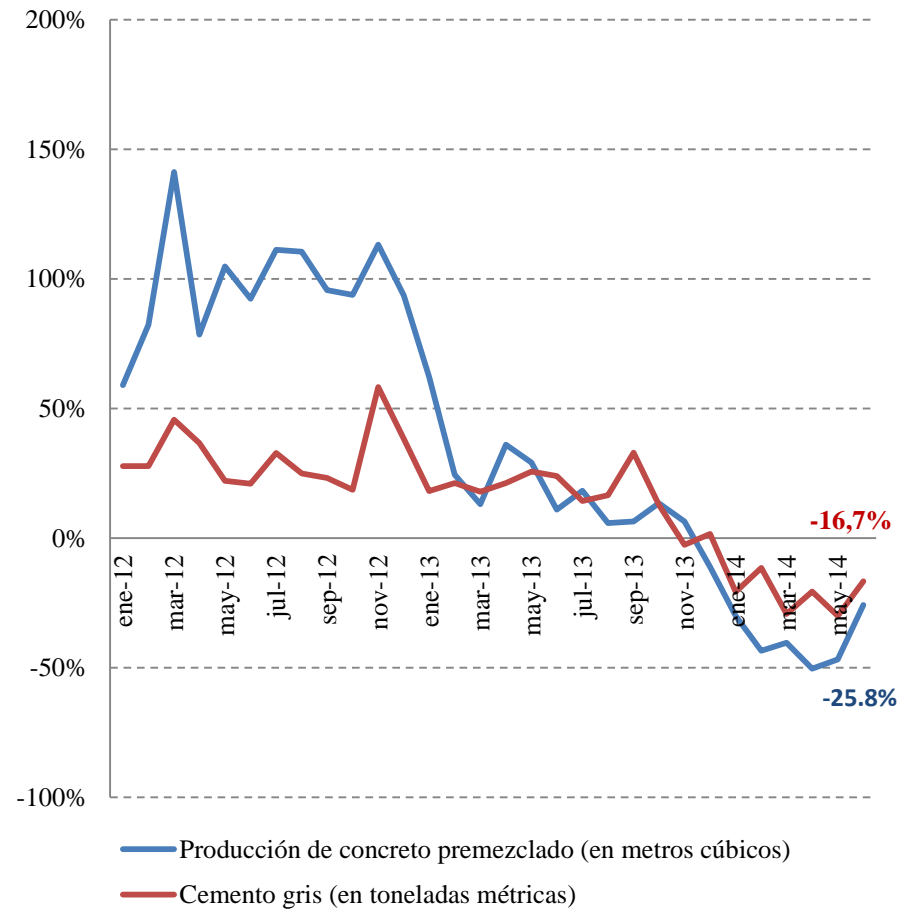
Some indicators show that the sector might be slowing down at the same rate as the rest of the economy. However, this data must be viewed cautiously, because other indicators show positive signs, indicating a recovery over the coming months.

Construction GDP Growth
(% Variation, y/y)



Source: SBP with NISC data

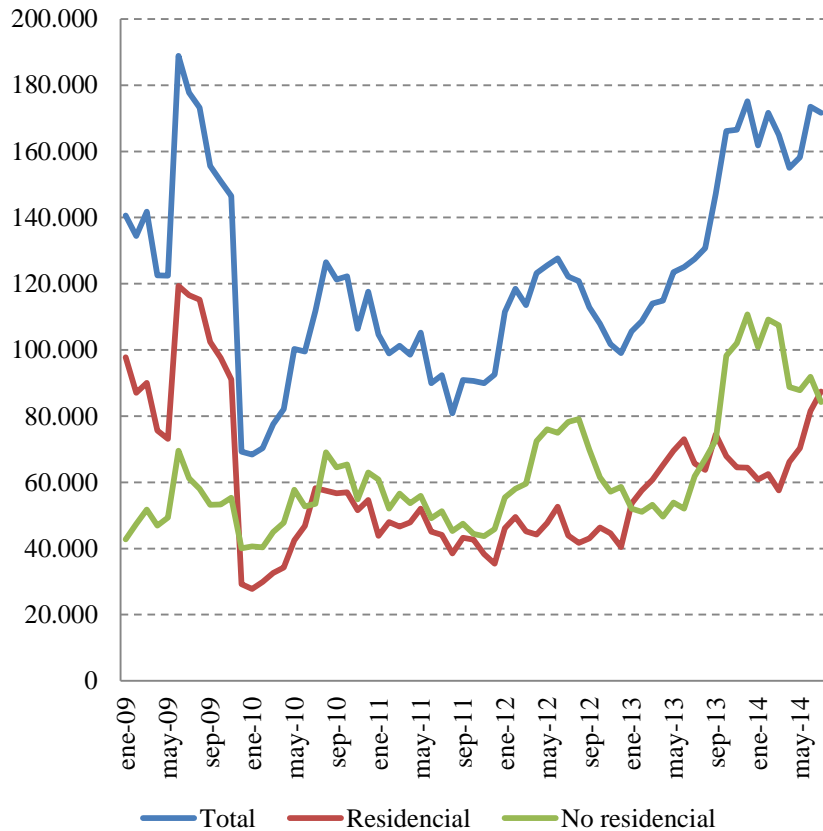
Concrete and Cement Production
January 2008 – June 2014



Source: SBP with NISC data

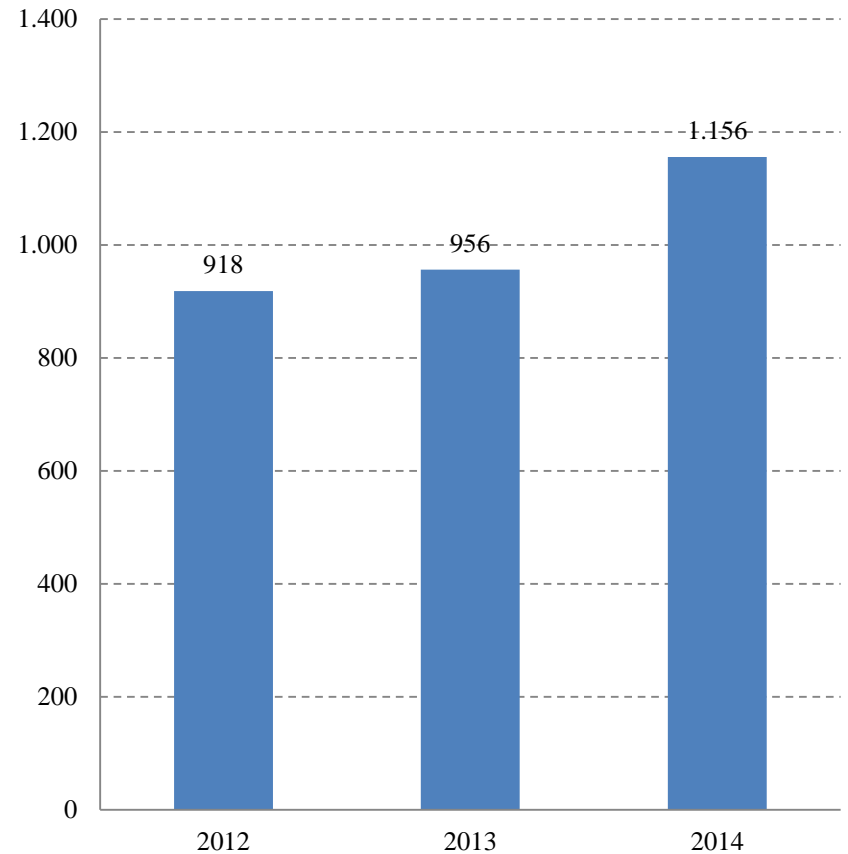
Contractor willingness to start new projects led to a significant increase in construction permits of 20.8% through July 2014. Construction permits are a pretty good indicator for the sector, because most registrations are translated into new construction after a delay of 1 and 4 quarters.

Value of Construction, Additions and Repair Work*
January 2009 – July 2014
(in thousands of US\$)



Source: SBP with NISC data
* Variable average

Value of Construction, Additions and Repair Work*
January 2009 – July 2014
(in thousands of US\$)



Source: SBP with NISC data.

Occupancy Permits: District of Panama Year: 2013

Township	Houses	Apartments	Total
Las Cumbres	1,444	32	1,476
Ancon	60	792	852
Tocumen	841	0	841
Pacora	762	0	762
Juan Diaz	185	382	567
San Francisco	7	450	457
Rio Abajo	0	304	304
Bethania	3	296	299
Bella Vista	1	298	299
Pueblo Nuevo	3	273	276
Parque Lefevre	5	243	248
Ernesto Cordoba	216	0	216
Pedregal	139	0	139
24 de Diciembre	49	0	49
Chilibre	10	0	10
Mañanitas	2	0	2
Alcalde Diaz	2	0	2
Calidonia	1	0	1
Total	3,730	3,070	6,800

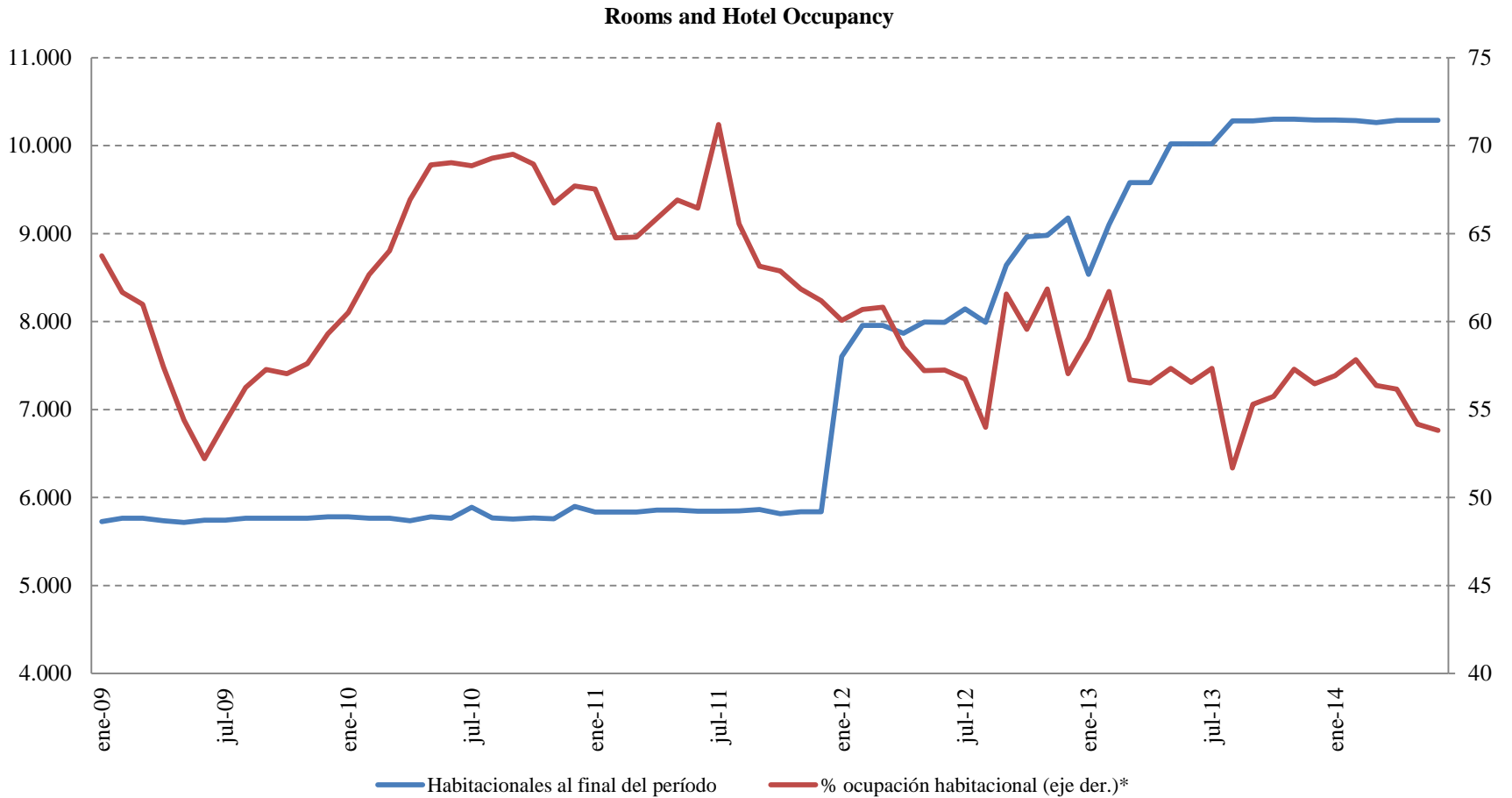
Source: SBP with CONVIVIENDA data.

Occupancy Permits: District of Panama Years: 2009 - 2013

District	2009	2010	2011	2012	2013
Panama	6,240	6,413	9,052	6,759	6,800
Chorrera	621	640	1,978	1,385	2,481
Arraijan	1,281	1,573	811	1,675	1,675
David	575	249	608	663	974
Colon	194	244	276	284	962
Anton	348	587	665	512	829
Chitre	290	351	540	490	620
Dolega			184	693	536
Penonome	277	310	610	300	403
Aguadulce	100	147	186	200	183
Boquete	134	80	94	108	164
Santiago	316	301	215	216	109

Source: SBP with CONVIVIENDA data.

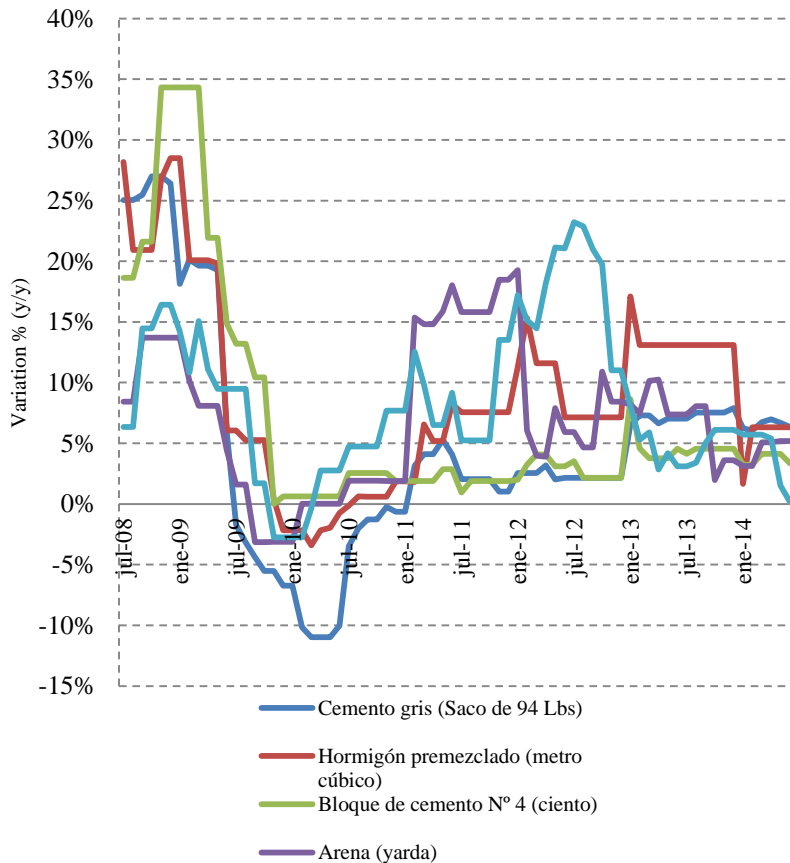
Through July, the Panama Tourism Authority (PTA) approved operating permits to open new hotels (33), representing a US\$102.8 million investment in hospitality construction. A greater number of rooms could impact hotel occupancy rates.



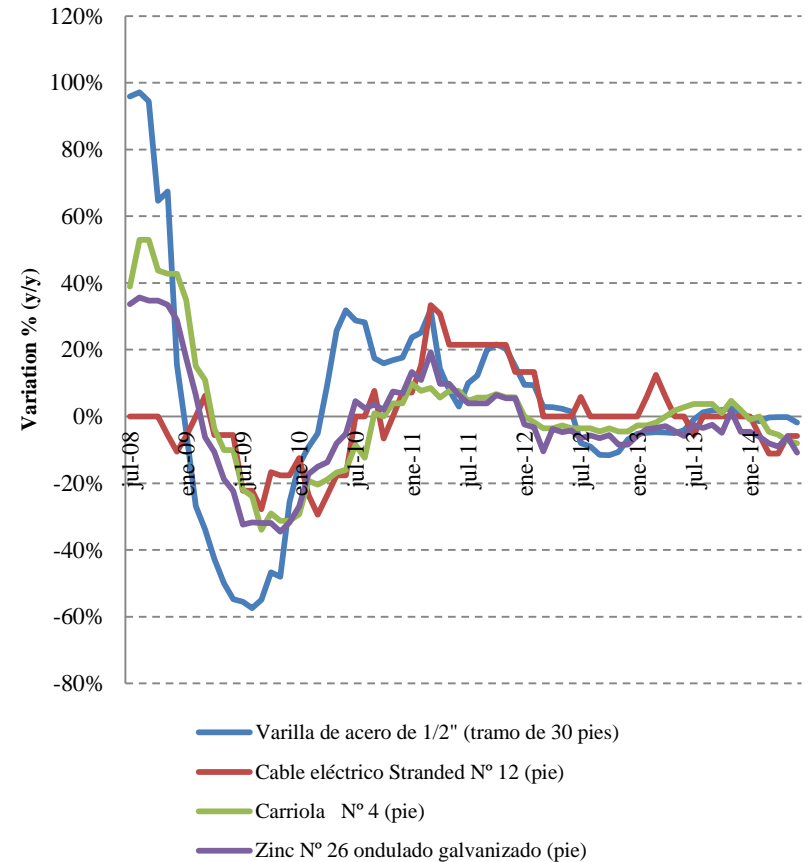
Source: SBP with data from NISC.
 * Seasonally adjusted data.

Most construction sector materials have increased, except for imported goods, in line with the prices of international commodities and other industrial goods, which have tended to stabilize after the high increases of recent years.

Variation of Construction Costs

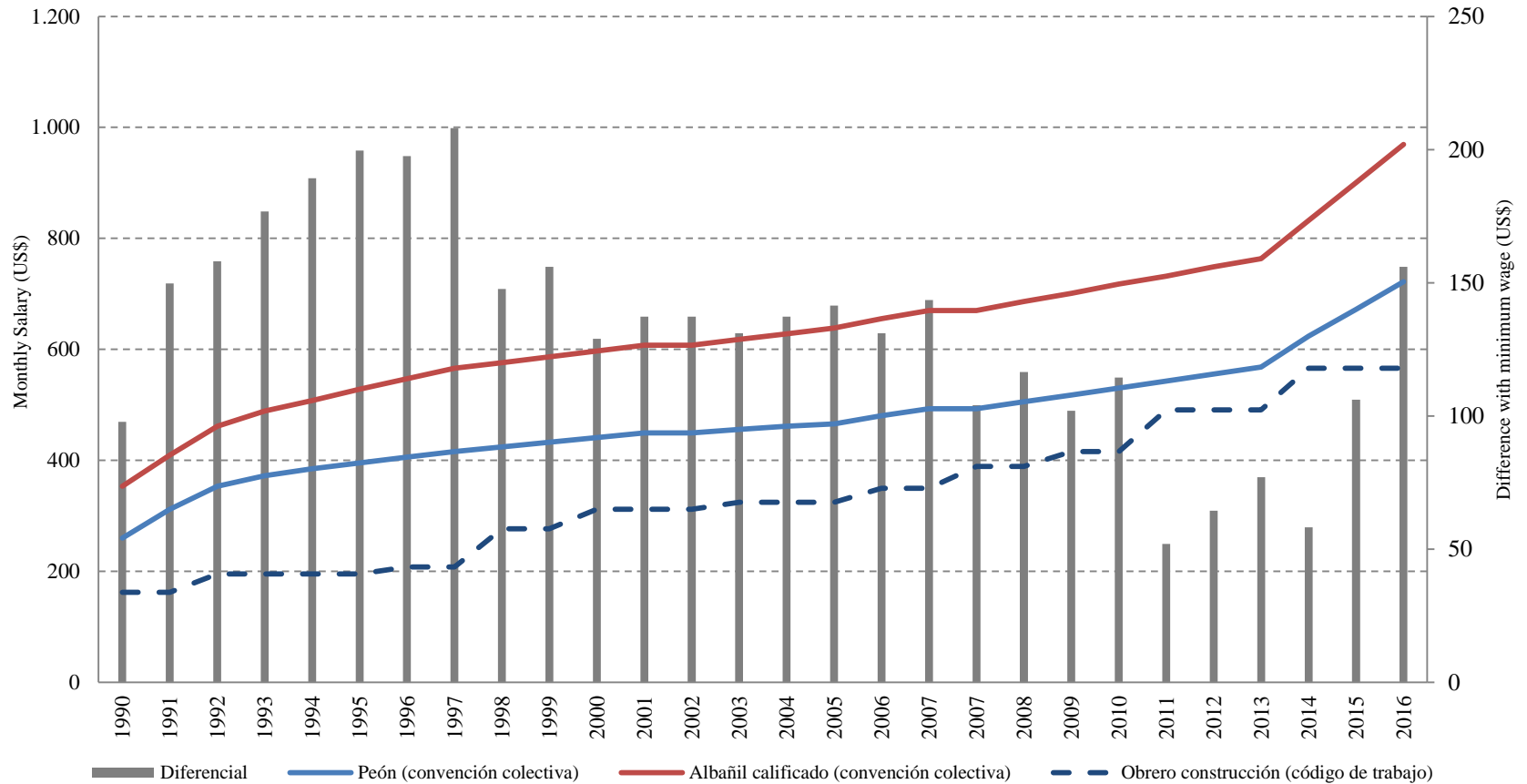


Variation of Construction Costs



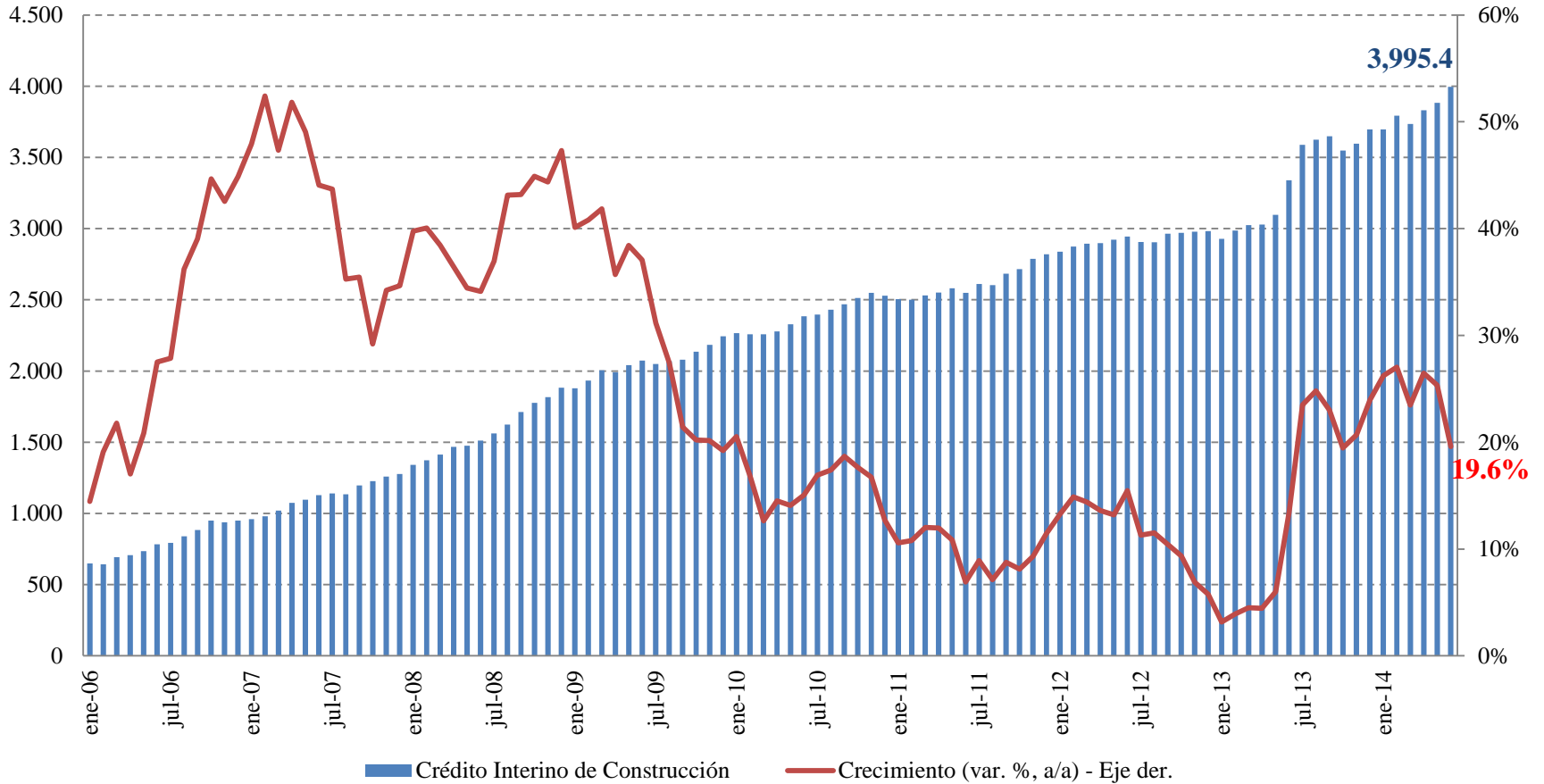
With regard to salaries and wages, in May 2014 a four-year agreement was reached whereby there would be a wage adjustment of approximately 35% over four years (2014 – 2017), an annual increase of 9%. For the purposes of important projects in the country, the increase will be around 11% (Clause 133).

Wages and Salaries



II. Performance of the NBS Construction Sector Portfolio

Loans to the Construction Sector January 2006 – June 2014 In millions US\$



National Banking System
Main Banks of the Construction Sector
As of June 30, 2014
(in millions of US\$)

Balances	Housing Construction	Commercial Construction	Infrastructure	Other Construction	Total
Banco General, S.A.	425.16	83.4	24.69	444.63	977.88
Banistmo, S.A.	191.73	98.91	98.23	412.33	801.2
Global Bank Corporation	225.97	107.51	124.83	62.35	520.65
Multibank, Inc.	23.37	4.75	2.49	168.81	199.42
BanESCO, S.A.	43.81	56.38	8.16	69.4	177.74
Other Banks	352.82	320.64	163.63	481.41	1,318.50
Total Construction	1,262.85	671.58	422.04	1,638.93	3,995.40

As of June 2014, the Construction Sector's HHI shows a total of 1,124, which, while it is slightly higher than the rest of the segments, shows a moderate concentration level. Ratios between 1,000 and 1,500 points are considered to reflect a moderate market concentration in the US legal system. Over 2,500 points, the market is considered too concentrated.

Herfindahl Index (HHI)
January 2002 - June 2014



Source: SBP's Financial Studies Division

Quality of the Construction Portfolio

As of June 30, 2014

in millions of US\$

Balances	Current	Current/ Total	Past Due	Past Due/ Total	Delinquent	Delinquent/ Total	Total
Housing Construction	1,223.20	96.90%	33.9	2.70%	5.8	0.50%	1,262.90
Commercial Construction	671.2	99.90%	0.1	0.00%	0.2	0.00%	671.6
Infrastructure	418.2	99.10%	1.1	0.30%	2.7	0.60%	422
Other Construction	1,621.90	99.00%	6.9	0.40%	10.1	0.60%	1,638.90
Total.....	3,934.50	98.50%	42.1	1.10%	18.9	0.50%	3,995.40

III. Construction Sector Survey Results

Housing under Construction: As of June 2014

Type of Housing	Units
Single family homes	9,964
Apartments	5,959
Total new housing	15,923

Single Family Homes

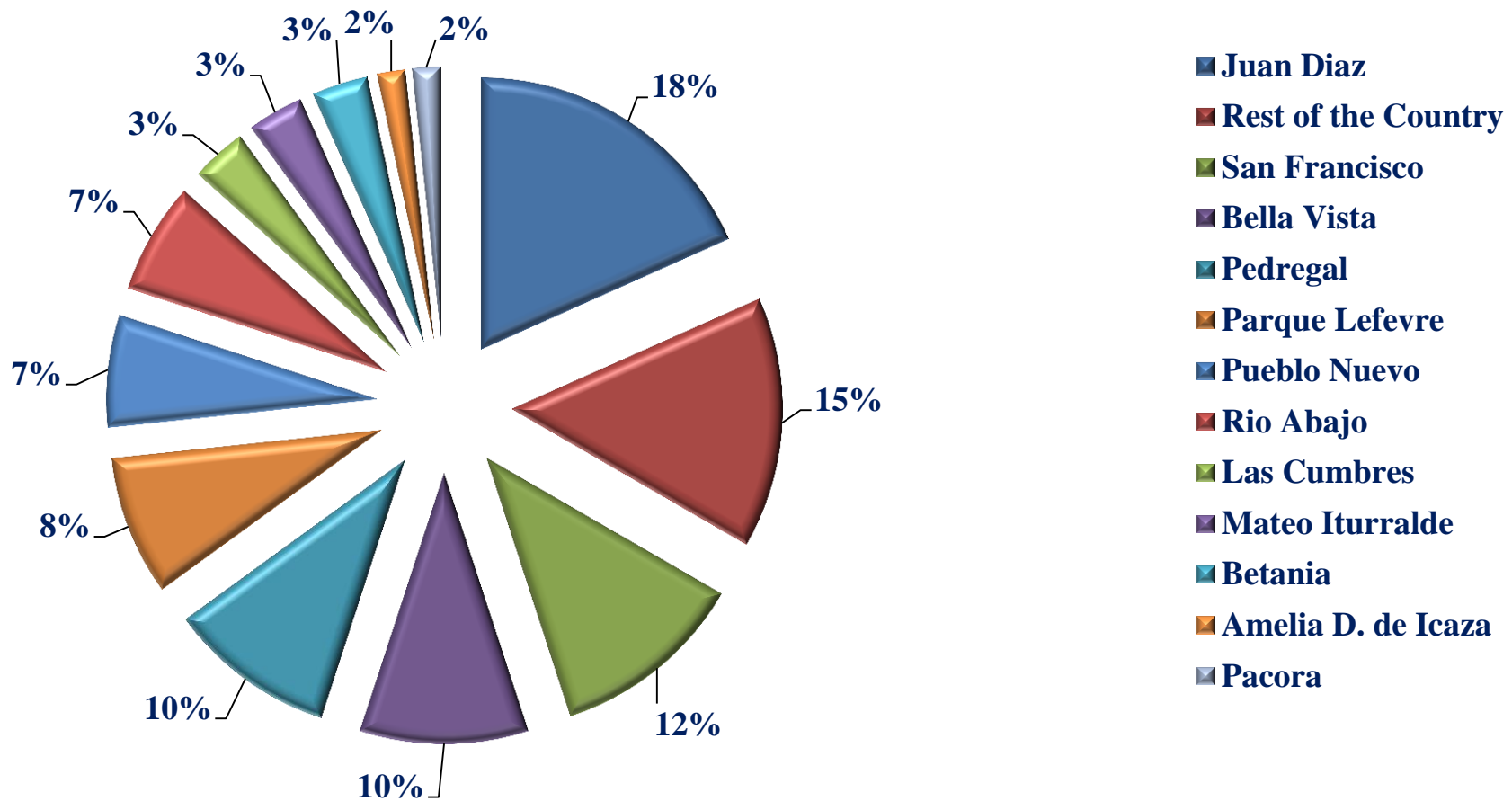
Analysis of Uninitiated Projects: as of June 2014

Location	Number of Projects	Number of Houses	Average Size in Square Meters
Ancon	1	51	225
Arraijan	19	1,617	133
Chitre – Herrera	2	299	62
Chorrera – Panama	3	312	93
David – Chiriquí	1	39	68
Penonome – Cocle	3	118	157
Panama – Beaches	2	124	351
Panama City	10	300	91
Total.....	41	2,860	

Apartments under Construction As of June 2014

Number of apartments to be delivered in 2014.	Number of apartments to be delivered in 2015.	Number of apartments to be delivered in 2016.	Number of apartments to be delivered after 2016.	Total New Apartments under Construction	Total Pre-sold
801	1,518	1,999	1,641	5,959	2,193

Distribution of Projects by Location (in percentages)



** The rest of the Country: Beaches in Cocle, Beaches in Panama, San Carlos, Chorrera,

Apartments under Construction by Bank

Banks	Projects	Apartments
Banco General	19	1,838
GLOBAL*	8	1,196
Banco Aliado*	4	845
Banesco	5	513
The Bank of Nova Scotia	3	500
Multibank	7	322
Banistmo S.A.	2	176
Capital Bank	2	130
Universal	5	125
Metrobank	1	124
Balboa Bank & Trust, Corp.	2	84
Banco Davivienda	1	45
Banvivivenda	1	38
Prival Bank	1	23
Total	61	5,959

*In preparing the table by bank, there is one project financed by multiple banks.

- Banco Aliado
- Global Bank

Data Survey Results: Commercial Locales 2014

Commercial Locales	2014
Total cost of the projects	2.54 billion
To be financed by banks	882 million
Number of loans approved by banks as domestic credit for commercial locales (pre-sale)	1,564
Number of loans approved by banks as foreign credit for commercial locales (pre-sale)	164

Comments on the Commercial Locale sub-sector

- Ninety percent (90%) of loans approved by banks are granted as domestic loans.
- Outside the province of Panama, commercial locales are focused mainly on Chiriqui, Colon and Veraguas.

Survey Data Results: Other Construction 2014

Type of Construction	Number of Projects	Total Cost (US\$ MM)	Amount to be Financed (US\$ MM)	Disbursements to Date
Fuel storage	1	0.255	0.204	0.66
Hotels	7	241	40	23
Malls	13	433	178	152
Schools	1	2	2	2
Tourism development	8	224	122	92
Improvements of food processing facilities	1	2	2	2
TOTAL	31	902	344	272

Comments on the Other Construction subsector

- The construction of 7 hotels, of which 6 are located in the province of Panama and another in Chiriqui, is highlighted.

Survey Data Results: Infrastructure 2014

Type of Infrastructure	Number of Projects	Total Cost (US\$ MM)	Amount to be financed by Banks (US\$ MM)	Payments to Date (US\$ MM)	Balance Owed
Construction of infrastructure for lots	2	12	3	2	1
Transportation Infrastructure	2	376	12	6	6
Residential Infrastructure	39	301	136	3	0
Other Infrastructure	2	6	5	4	4
Total	45	695	156	15	11

Comments on the Infrastructure subsector

- Around 11 banks report this item.
- Mainly focused on housing infrastructure projects.
- Some of these projects are destined for beach residences/villas.

Appendix

Granger Causality Test between the Economic Cycle and the Sector Cycle

Null Hypothesis	Statistical	Probability	Interpretation
Economic cycle does not influence sector cycle	3.17988	0.0482	There is causality from the economy to the sector
Sector cycle does not influence economic cycle	1.19305	0.3099	There is no causality from the sector to the economy
Overall GDP does not influence sector GDP	5.58746	0.0058	There is causality from the economy to the sector
Sector GDP does not influence overall GDP	2.29496	0.109	There is no causality from the sector to the economy

Source: SBP's Financial Studies Division