

Commodities crumble in a crisis...

Agricultural commodity markets have slumped.

The S&P GS commodity price index is down 10% over the past month alone and more than 20% lower over the past six months. Similarly, the CBA rural commodity price index is down 21% over the past six months in USD terms, and in AUD terms, the CBA index is off 15%. Clearly, the slumping Aussie dollar has not been sufficient to hold local prices steady.

The past month has been particularly cruel. US corn and soybean prices have been the worst performers, falling 19% and 18% respectively. But they were not alone. Of the 12 global agricultural commodities presented in Figure 1, only US live cattle prices rose over the past month. Other commodity types have slumped also. Copper is off nearly 20% over the month, crude oil prices have fallen 4% (down 14% just a few days ago) and gold, the so-called 'safe-haven', has seen its value decline by 9.5%.

The USD has surged more than 3.5% and the value of the Aussie dollar has crumbled 8.4%. These are huge moves in the currency market.

A falling tide sinks all boats...

Clearly the ag markets are not alone in the current market turmoil. All risk assets have fallen in tandem as the European debt crisis has intensified. A Greek default is seemingly inevitable, and the market was unimpressed with a lack of European policy action during September. More concerted policy action over the past few days in Europe has calmed market fears, for now.

The financial troubles seem to be spreading into the real economy, and widely followed analysts have begun to revise lower their global economic growth forecasts. Europe may fall into a recession according to some analysts, and the risks of a US recession have increased. The world is worried that GFC Mark II is just around the corner.

Despite tight agriculture commodity supplies...

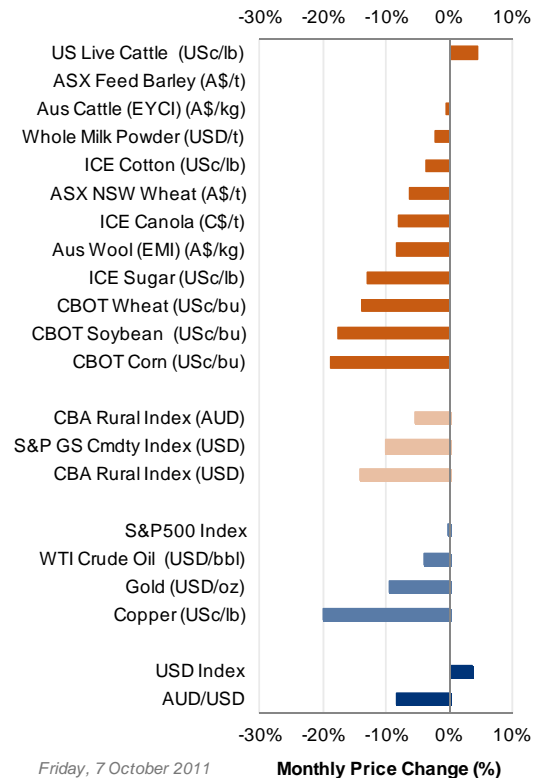
The sharp losses across ag prices occurred despite extraordinarily tight supplies for many key commodities.

As we outlined in our 30th August [Agri Updates report](#), global feed grain supplies may fall to their tightest levels since 1973. US corn stocks may fall to near their second tightest level on record. But still, corn prices have tumbled 19% over the past month, at a time when grain production uncertainty in the US, South America and Europe has risen. But as we also stated in the August report, "if the global economy spirals out of control, ag commodities, no matter how tight their supplies, will get caught in the storm." The economic uncertainty has currently taken precedence over the tight supply situation

What's next?

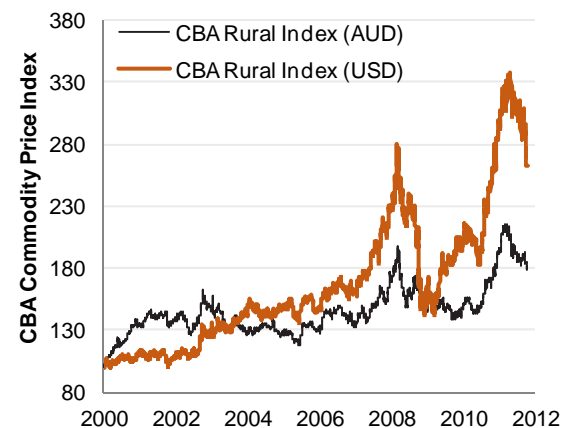
It is important to note that CBA's Economics Research team is not forecasting either a European, or global, recession. But nonetheless, in this paper we discuss why agricultural commodity prices crumble in a crisis, and provide a snapshot of how far values fell in GFC Mark I.

Figure 1: Monthly movers (price change, 30 days)



Source: Bloomberg and CBA

Figure 2: CBA Commodity Price Index



Source: CBA



Commodities in a crisis

We have previously outlined that agricultural commodity prices slump during a crisis for two main reasons. These are:

1. Agricultural commodities are risky assets

Agricultural commodity demand suffers as incomes decline, despite the common misconception that demand is stable because “people still have to eat”. During the 2008/09 GFC global dairy consumption fell 0.6% year-on-year, beef consumption fell 0.3%, and cotton consumption fell 11%. People still have to eat, they just eat less.

In addition, prior expectations of agricultural commodity demand get revised lower as economic conditions deteriorate. For example, as the GFC unfolded, the USDA began slashing their estimates of commodity demand for the 2008/09 season. Figure 3 indicates that from October 2008 to April 2009, the USDA revised its estimate of 2008/09 global wheat consumption lower by 1.4%, coarse grain consumption lower by 2.4%, oilseed consumption lower by 2.2% and cotton consumption lower by 10%.

The large declines in agriculture markets over the past month are, in part, because the market currently fears demand destruction. And the latest USDA Quarterly Grain Stocks report (30th September) suggests these fears are vindicated. Figure 4 indicates that the implied disposal of US corn from June-August 2011 fell to 2.54 billion bushels, down 2.3% from the 2.6 billion used a year earlier. Similarly, soybean disposal during the same period fell 4% from a year earlier, and US wheat consumption fell 2% year-on-year. Consequently, US grain inventories at 1 September 2011 were not as tight as originally feared. US corn stocks officially printed at 1.13 billion bushels, 19% above trade estimates. Wheat stocks were officially forecast at 2.15 billion bushels, 6% above trade estimates.

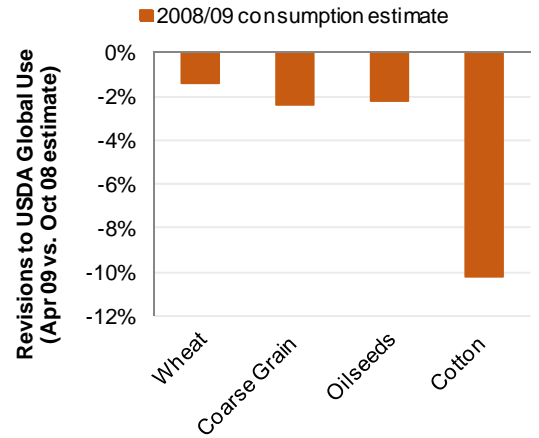
2. The flight to safety causes the USD to appreciate

The USD surges during a financial crisis as US investors repatriate their funds. And a higher USD has a negative valuation impact on USD denominated commodity prices. This is logical considering most globally traded agricultural commodities are denominated in USDs, the US is the most significant producer and exporter of a host of key agricultural commodities, and the foremost agricultural commodity futures exchanges are located in the US.

Figure 5 indicates the inverse relationship that exists between the USD and agricultural commodity prices, in USD terms. The following table indicates that since 2005, the correlation between the USD and USD denominated commodity prices has been -75%. Furthermore, the correlation between AUD commodity prices and the AUD/USD has a positive correlation of 73%, refuting the common saying of “a high AUD is bad for Australian commodity prices”. In fact, a high AUD is good for Australian agricultural commodity prices.

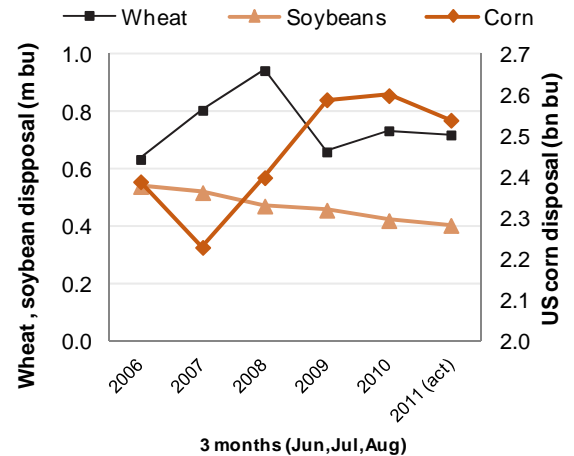
Correlations	1997 to Current	2005 to Current
Rural Price index (USD) : USD Index	-79%	-75%
Rural Price index (AUD) : AUD/USD	59%	73%
AUD/USD : USD Index	-91%	-79%

Figure 3: Revisions to the USDA's 2008/09 global commodity consumption estimate



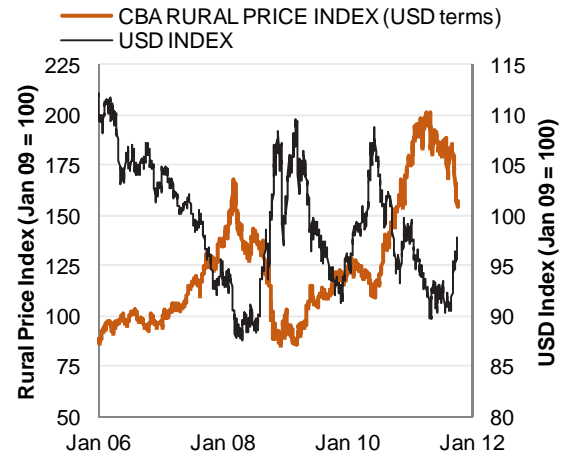
Source: USDA and CBA

Figure 4: US corn, wheat and soybean disposal



Source: USDA and CBA

Figure 5: Rural commodity price index vs. USD



Source: Bloomberg and CBA



How low can we go?

The 2008 GFC provides a recent precedence of the magnitude of price declines in the agricultural commodity complex during times of crisis. The statistics are sobering.

In the 12 months from July 2008 to July 2009, the peak to trough price movements include:

- Corn prices down 61% to US\$2.93/bu
- Wheat prices down 64% to US\$4.75/bu
- Soybean prices down 53% to US\$7.83/bu
- Cotton prices down 56% to US\$39.14/lb
- Sugar prices down 44% to US\$9.52/lb.
- Whole milk powder prices down 61% to USD1850/t
- Australian wool prices down 31% to A\$7.71/kg
- Australian beef prices down 18% to A\$2.98/kg
- The CBA rural price index (USD) down 49%
- The CBA rural price index (AUD) down 26%

Despite the big losses observed across agricultural markets over the past few months, these GFC lows remain massively below the current spot prices. Figure 6 indicates that cotton and sugar prices could slump a further 62% from current levels before the GFC lows are reached. The corn market can fall a further 52% and the US wheat market can fall another 27%. Overall, the rural price index would need to fall another 45% in USD terms and 20% in AUD terms before the GFC lows are reached.

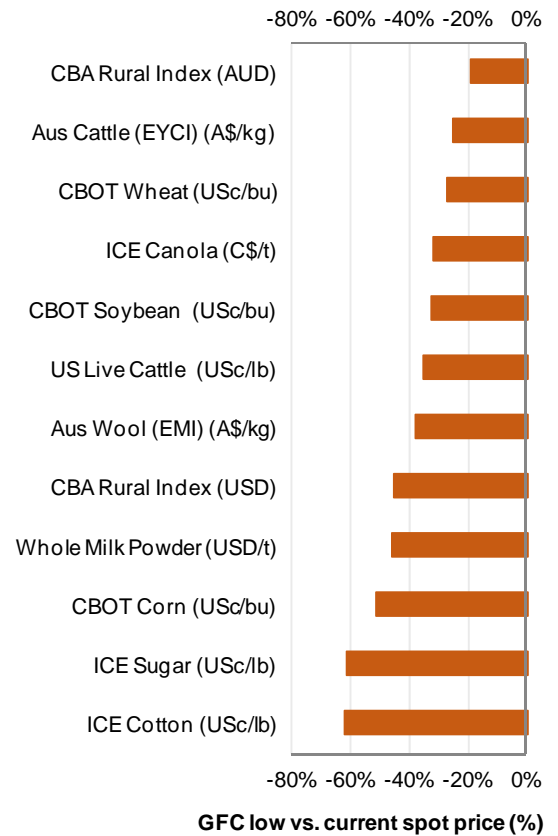
Where to next?

It is extraordinarily difficult to predict how these current financial and economic ructions will play out.

If the world remains intact and a European/US recession is avoided, which remains the CBA Economics Research team’s forecast, the agricultural market will return its focus to the fundamental outlook. Here the market will see near-record tight world coarse grain supplies, tightening oilseed supplies and uncertain 2012 grain and oilseed production prospects in the face of another La Nina. These factors are solid grounds for much higher grain and oilseed prices.

But if the global economy does implode, ag commodities, no matter how tight their supplies, will get caught in the storm. The GFC provides a sobering reminder of what can happen.

Figure 6: GFC lows vs. current spot price



Source: Bloomberg and CBA



Please view our website at www.research.commbank.com.au. The Commonwealth Bank of Australia ABN 48 123 123 124 AFSL 234945 ("the Bank") and its subsidiaries, including Commonwealth Securities Limited ABN 60 067 254 399 AFSL 238814 ("CommSec"), Commonwealth Australia Securities LLC, CBA Europe Ltd and Global Markets Research, are domestic or foreign entities or business areas of the Commonwealth Bank Group of Companies (CBGOC). CBGOC and their directors, employees and representatives are referred to in this Appendix as "the Group". This report is published solely for informational purposes and is not to be construed as a solicitation or an offer to buy any securities or financial instruments. This report has been prepared without taking account of the objectives, financial situation and capacity to bear loss, knowledge, experience or needs of any specific person who may receive this report. No member of the Group does, or is required to, assess the appropriateness or suitability of the report for recipients who therefore do not benefit from any regulatory protections in this regard. All recipients should, before acting on the information in this report, consider the appropriateness and suitability of the information, having regard to their own objectives, financial situation and needs, and, if necessary seek the appropriate professional, foreign exchange or financial advice regarding the content of this report. We believe that the information in this report is correct and any opinions, conclusions or recommendations are reasonably held or made, based on the information available at the time of its compilation, but no representation or warranty, either expressed or implied, is made or provided as to accuracy, reliability or completeness of any statement made in this report. Any opinions, conclusions or recommendations set forth in this report are subject to change without notice and may differ or be contrary to the opinions, conclusions or recommendations expressed elsewhere by the Group. We are under no obligation to, and do not, update or keep current the information contained in this report. The Group does not accept any liability for any loss or damage arising out of the use of all or any part of this report. Any valuations, projections and forecasts contained in this report are based on a number of assumptions and estimates and are subject to contingencies and uncertainties. Different assumptions and estimates could result in materially different results. The Group does not represent or warrant that any of these valuations, projections or forecasts, or any of the underlying assumptions or estimates, will be met. Past performance is not a reliable indicator of future performance. The Group has provided, provides, or seeks to provide, investment banking, capital markets and/or other services, including financial services, to the companies described in the report and their associates. This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject any entity within the Group to any registration or licensing requirement within such jurisdiction. All material presented in this report, unless specifically indicated otherwise, is under copyright to the Group. None of the material, nor its content, nor any copy of it, may be altered in any way, transmitted to, copied or distributed to any other party, without the prior written permission of the appropriate entity within the Group. In the case of certain products, the Bank or one of its related bodies corporate is or may be the only market maker. The Group, its agents, associates and clients have or have had long or short positions in the securities or other financial instruments referred to herein, and may at any time make purchases and/or sales in such interests or securities as principal or agent, including selling to or buying from clients on a principal basis and may engage in transactions in a manner inconsistent with this report.

US Investors: If you would like to speak to someone regarding the subject securities described in this report, please contact Commonwealth Australia Securities LLC (the "US Broker-Dealer"), a broker-dealer registered under the U.S. Securities Exchange Act of 1934 (the "Exchange Act") and a member of the Financial Industry Regulatory Authority ("FINRA") at 1 (212) 336-7737. This report was prepared, approved and published by Global Markets Research, a division of Commonwealth Bank of Australia ABN 48 123 123 124 AFSL 234945 ("the Bank") and distributed in the U.S. by the US Broker-Dealer. The Bank is not registered as a broker-dealer under the Exchange Act and is not a member of FINRA or any U.S. self-regulatory organization. Commonwealth Australia Securities LLC ("US Broker-Dealer") is a wholly owned, but non-guaranteed, subsidiary of the Bank, organized under the laws of the State of Delaware, USA, with limited liability. The US Broker-Dealer is not authorized to engage in the underwriting of securities and does not make markets or otherwise engage in any trading in the securities of the subject companies described in our research reports. The US Broker-Dealer is the distributor of this research report in the United States under Rule 15a-6 of the Exchange Act and accepts responsibility for its content. Global Markets Research and the US Broker-Dealer are affiliates under common control. Computation of 1% beneficial ownership is based upon the methodology used to compute ownership under Section 13(d) of the Exchange Act. The securities discussed in this research report may not be eligible for sale in all States or countries, and such securities may not be suitable for all types of investors. Offers and sales of securities discussed in this research report, and the distribution of this report, may be made only in States and countries where such securities are exempt from registration or qualification or have been so registered or qualified for offer and sale, and in accordance with applicable broker-dealer and agent/salesman registration or licensing requirements. The preparer of this research report is employed by Global Markets Research and is not registered or qualified as a research analyst, representative, or associated person under the rules of FINRA, the New York Stock Exchange, Inc., any other U.S. self-regulatory organization, or the laws, rules or regulations of any State.

European Investors: This report is published, approved and distributed in the UK by the Bank and by CBA Europe Ltd ("CBAE"). The Bank and CBAE are both registered in England (No. BR250 and 05687023 respectively) and authorised and regulated in the UK by the Financial Services Authority ("FSA"). This report does not purport to be a complete statement or summary. For the purpose of the FSA rules, this report and related services are not intended for retail customers and are not available to them. The products and services referred to in this report may put your capital at risk. Investments, persons, matters and services referred to in this report may not be regulated by the FSA. CBAE can clarify where FSA regulations apply.

Singapore Investors: This report is distributed in Singapore by Commonwealth Bank of Australia, Singapore Branch (company number F03137W) and is made available only for persons who are Accredited Investors as defined in the Singapore Securities and Futures Act and the Financial Advisers Act. It has not been prepared for, and must not be distributed to or replicated in any form, to anyone who is not an Accredited Investor.

Hong Kong Investors: This report was prepared, approved and published by the Bank, and distributed in Hong Kong by the Bank's Hong Kong Branch. The Hong Kong Branch is a registered institution with the Hong Kong Monetary Authority to carry out the Type 1 (Dealing in securities) and Type 4 (Advising on securities) regulated activities under the Securities and Futures Ordinance. Investors should understand the risks in investments and that prices do go up as well as down, and in some cases may even become worthless. Research report on collective investment schemes which have not been authorized by the Securities and Futures Commission is not directed to, or intended for distribution in Hong Kong.

All investors: Analyst Certification and Disclaimer: Each research analyst, primarily responsible for the content of this research report, in whole or in part, certifies that with respect to each security or issuer that the analyst covered in this report: (1) all of the views expressed accurately reflect his or her personal views about those securities or issuers; and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in the report. The analyst(s) responsible for the preparation of this report may interact with trading desk personnel, sales personnel and other constituencies for the purpose of gathering, synthesizing, and interpreting market information. Directors or employees of the Group may serve or may have served as officers or directors of the subject company of this report. The compensation of analysts who prepared this report is determined exclusively by research management and senior management (not including investment banking). No inducement has been or will be received by the Group from the subject of this report or its associates to undertake the research or make the recommendations. The research staff responsible for this report receive a salary and a bonus that is dependent on a number of factors including their performance and the overall financial performance of the Group, including its profits derived from investment banking, sales and trading revenue.

Unless agreed separately, we do not charge any fees for any information provided in this presentation. You may be charged fees in relation to the financial products or other services the Bank provides, these are set out in the relevant Financial Services Guide (FSG) and relevant Product Disclosure Statements (PDS). Our employees receive a salary and do not receive any commissions or fees. However, they may be eligible for a bonus payment from us based on a number of factors relating to their overall performance during the year. These factors include the level of revenue they generate, meeting client service standards and reaching individual sales portfolio targets. Our employees may also receive benefits such as tickets to sporting and cultural events, corporate promotional merchandise and other similar benefits. If you have a complaint, the Bank's dispute resolution process can be accessed on 132221.

Unless otherwise noted, all data is sourced from Australian Bureau of Statistics material (www.abs.gov.au).



Research

Commodities		Telephone	Email Address
Luke Mathews	Agri Commodities	+612 9118 1098	luke.mathews@cba.com.au
Lachlan Shaw	Mining & Energy Commodities	+613 9675 8618	lachlan.shaw@cba.com.au
Paul Hodsman, CFA	Mining & Energy Commodities	+613 9675 8532	paul.hodsman@cba.com.au
Elise Aaternir	Mining & Energy Commodities	+613 9675 6202	elise.aaternir@cba.com.au

Economics		Telephone	Email Address
Michael Blythe	Chief Economist	+612 9118 1101	michael.blythe@cba.com.au
Michael Workman	Senior Economist	+612 9118 1019	michael.workman@cba.com.au
John Peters	Senior Economist	+612 9117 0112	john.peters@cba.com.au
James McIntyre	Economist	+612 9118 1100	james.mcintyre@cba.com.au

Fixed Income		Telephone	Email Address
Adam Donaldson	Head of Debt Research	+612 9118 1095	adam.donaldson@cba.com.au
Philip Brown	Fixed Income Quantitative Strategist	+612 9118 1090	philip.brown@cba.com.au
Alex Stanley	Associate Analyst, Fixed Income	+612 9118 1125	alex.stanley@cba.com.au
Steve Shoobert	Credit Research Analyst	+612 9118 1096	steve.shoobert@cba.com.au
Winnie Chee	Securitized Product	+612 9118 1104	winnie.chee@cba.com.au
Tally Dewan	Quantitative Analyst	+612 9118 1105	tally.dewan@cba.com.au
Kevin Ward	Database Manager	+612 9118 1960	kevin.ward@cba.com.au

Foreign Exchange and International Economics		Telephone	Email Address
Richard Grace	Chief Currency Strategist & Head of International Economics	+612 9117 0080	richard.grace@cba.com.au
Joseph Capurso	Currency Strategist	+612 9118 1106	joseph.capurso@cba.com.au
Peter Dragicevich	FX Economist	+612 9118 1107	peter.dragicevich@cba.com.au
Andy Ji	Asian Currency Strategist	+65 6349 7056	andy.ji@cba.com.au
Chris Tennent-Brown	FX Economist	+612 9117 1378	chris.tennent.brown@cba.com.au
Martin McMahon	Economist Europe	+44 20 7710 3918	martin.mcmahon@cba.com.au

Delivery Channels & Publications		Telephone	Email Address
Monica Eley	Internet/Intranet	+612 9118 1097	monica.eley@cba.com.au
Ai-Quynh Mac	Information Services	+612 9118 1102	maca@cba.com.au

New Zealand		Telephone	Email Address
Nick Tuffley	ASB Chief Economist	+649 301 5659	nick.tuffley@asb.co.nz
Jane Turner	Economist	+649 301 5660	jane.turner@asb.co.nz
Christina Leung	Economist	+649 301 5661	christina.leung@asb.co.nz

Sales

Institutional	Telephone	Equities	Telephone
Syd FX	+612 9117 0190	Syd	+612 9118 1446
	+612 9117 0341	Asia	+613 9675 6967
Credit	+612 9117 0020	Lon/Eu	+44 20 7710 3573
Japan Desk	+612 9117 0025	NY	+1212 336 7749
Melb	+613 9675 6815		
	+613 9675 7495	Corporate	Telephone
	+613 9675 6618	NSW	+612 9117 0377
	+613 9675 7757	VIC	+612 9675 7737
Lon FX	+44 20 7329 6266	SA	+618 8206 4155
Debt & Derivatives	+44 20 7329 6444	WA	+618 9482 6044
Corporate	+44 20 7710 3905	QLD	+617 3015 4525
HK	+852 2844 7538	NZ	+64 9375 5738
Sing	+65 6349 7077	Metals Desk	+612 9117 0069
NY	+1212 336 7739	Agri Desk (Corp)	+612 9117 0157
		Agri Desk	+612 9117 0145